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15N => 31
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38N => 30
DOV => 27
EVY => 30
GED => 29
ILG => 31

GENERAL INFORMATION

This Airport/Facility Directory is a Civil Flight Information Publication published and distributed every eight weeks by the FAA, Department of Transportation, National Aeronautical Navigation Services, Silver Spring, Maryland 20910. It is designed for use with Aeronautical Charts covering the conterminous United States, Puerto Rico and the Virgin Islands.

This directory contains all open to the public airports, seaplane bases and heliports, military facilities, and selected private use facilities specifically requested by the Department of Defense (DoD) for which a DoD Instrument Approach Procedure has been published in the U.S. Terminal Procedures Publication. Additionally, this directory contains communications data, navigational facilities and certain special notices and procedures.

Military data contained within this publication is provided by the National Geospatial–Intelligence Agency and is intended to provide reference data for military and/or joint civil/military airports. Not all military data contained in this publication is applicable to civil users.

CORRECTIONS, COMMENTS, AND/OR PROCUREMENT

CRITICAL information such as equipment malfunction, abnormal field conditions, hazards to flight, etc., should be reported as soon as possible to the nearest FAA facility, either in person or by reverse charge telephone call.

FOR AIRPORT SUPPLEMENT REVISIONS FORM VISIT WEB SITE: http://nfdc.faa.gov/portal/airportchanges.do

FAA, Aeronautical Information Services, ATO–R, Rm. 626
800 Independence Ave., SW
Washington, DC 20591
Telephone 1–866–295–8236
Fax 202–267–5322
Email 9–ATOR–HQ–AIS–AIRPORTCHANGES@FAA.GOV

NOTICE: Changes must be received by the Aeronautical Information Services as soon as possible but not later than the ''cut-off'' dates listed below to assure publication on the desired effective date.

Effective Date	Airport Information Cut-off date	Airspace Information* Cut-off date
3 Jun 10	21 Apr 10	1 Apr 10
29 Jul 10	16 Jun 10	27 May 10
23 Sep 10	11 Aug 10	22 Jul 10
18 Nov 10	6 Oct 10	16 Sep 10
13 Jan 11	1 Dec 10	11 Nov 10
10 Mar 11	26 Jan 11	6 Jan 11

*Including changes to preferred routes and graphic depictions on charts.

FOR CHARTING ERRORS CONTACT:

FAA, National Aeronautical Navigation Services
SSMC–4 Sta. #4435
1305 East West Highway
Silver Spring, MD 20910–3281
Telephone 1–800–626–3677
Email 9–AMC–Aerochart@faa.gov

Frequently asked questions (FAQs) are answered on our website at http://aeronav.faa.gov.
See the FAQs prior to contact via toll free number.

FOR PROCUREMENT CONTACT:

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Email 9–AMC–Chartsales@faa.gov
Telephone 1–800–638–8972
Fax 301–436–6829
or any authorized chart agent.

New or Changed Information—To alert users of new information or changes to information from the previous issue, a vertical line will be portrayed in the outside margin and extending the full length of the new and/or revised data. This will not apply to the front cover or the airport/facility directory listing.

This Airport/Facility Directory comprises part of the following sections of the United States Aeronautical Information Publication (AIP): GEN, ENR and AD.

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ABBREVIATIONS

The following abbreviations/acronyms are those commonly used within this Directory. Other abbreviations/acronyms may be found in the Legend and are not duplicated below. The abbreviations presented are intended to represent grammatical variations of the basic form. (Example–''req'' may mean ''request'', ''requesting'', ''requested'', or ''requests'').

AAF	Army Air Field	byd	beyond
AB	Airbase	C	Commercial Circuit (Telephone)
abv	above	CGAF	Coast Guard Air Facility
ACC	Air Combat Command; Area Control Center	CGAS	Coast Guard Air Station
		CIV	Civil
acft	aircraft	clsd	closed
ADCC	Air Defense Control Center	comd	command
AER	approach end rwy	CONUS	Continental United States
AFB	Air Force Base	CSTMS	Customs
AFHP	Air Force Heliport	ctc	contact
afld	airfield	ctl	control
AFOD	US Army Flight Operations Detachment	dalgt	daylight
AFRC	Armed Forces Reserve Center/Air Force Reserve Command	Dec	December
		DIAP	DoD Instrument Approach Procedure
AFSS	Automated Flight Service Station	DoD	Department of Defense
AG	Agriculture	DSN	Defense Switching Network (Telephone)
A–GEAR	Arresting Gear	dsplcd	displaced
AGL	above ground level	durn	duration
AHP	Army heliport	eff	effective
ALS	Approach Light System	emerg	emergency
alt	altitude	EOR	End of Runway
AMC	Air Mobility Command	ETA	Estimated Time of Arrival
ANGS	Air National Guard Station	ETD	Estimated Time of Departure
apch	approach	exc	except
Apr	April	extd	extend
APU	Auxiliary Power Unit	FBO	fixed–base operator
ARB	Air Reserve Base	Feb	February
arpt	airport	fld	field
ARS	Air Reserve Station	FLIP	Flight Information Publication
AS	Air Station	flt	flight
ASDE–X	Airport Surface Detection Equipment—Model X	flw	follow
		Fri	Friday
ASU	Aircraft Starting Unit	FSS	Flight Service Station
ATC	Air Traffic Control	GA	glide angle
Aug	August	GCA	Ground Controlled Approach
AUW	All Up Weight (gross weight)	GS	glide slope
avbl	available	haz	hazard
bcn	beacon	HQ	Headquarters
blo	below		

CONTINUED ON NEXT PAGE

CONTINUED FROM PRECEDING PAGE

hr	hour
IAP	Instrument Approach Procedure
ICAO	International Civil Aviation Organization
IFR	Instrument Flight Rules
ILS	Instrument Landing System
IM	Inner Marker
IMG	Immigration
incr	increase
indef	indefinite
ints	intensity
invof	in the vicinity of
IMC	Instrument Meteorological Conditions
Jan	January
JASU	Jet Aircraft Starting Unit
JOAP	Joint Oil Analysis Program
JOSAC	Joint Operational Support Airlift Center
JRB	Joint Reserve Base
Jul	July
Jun	June
Kt	Knots
LAA	Local Airport Advisory
LAHSO	Land and Hold Short Operations
lbs	pounds
ldg	landing
lgtd	lighted
lgts	lights
LMM	Compass locator at Middle Marker ILS
LOC	Localizer
LOM	Compass locator at Outer Marker ILS
ltd	limited
MACC	Military Area Control Center
Mar	March
MCAF	Marine Corps Air Facility
MCALF	Marine Corps Auxiliary Landing Field
MCAS	Marine Corps Air Station
MCB	Marine Corps Base
med	medium
METRO	Pilot-to-Metro voice call
Mil	military
min	minute
MLS	Microwave Landing System
MM	Middle Marker of ILS
Mon	Monday
MP	Maintenance Period
MSL	mean sea level
MSAW	minimum safe altitude warning
NAAS	Naval Auxiliary Air Station
NADC	Naval Air Development Center
NADEP	Naval Air Depot
NAEC	Naval Air Engineering Center
NAES	Naval Air Engineering Station
NAF	Naval Air Facility
NALCO	Naval Air Logistics Control Office
NALO	Navy Air Logistics Office
NALF	Naval Auxiliary Landing Field
NAS	Naval Air Station
NAWC	Naval Air Warfare Center
NAWS	Naval Air Weapons Station
ngt	night
NOLF	Naval Outlying Field
Nov	November
npi	non precision instrument
NS ABTMT	Noise Abatement
NSTD	nonstandard
ntc	notice
obsn	observation
Oct	October
OLF	Outlying Field
opr	operate, operator, operational
ops	operations
OTS	out of service
ovrn	overrun
PAEW	personnel and equipment working
pat	pattern
p-line	power line
PMSV	Pilot-to-Metro Service
POL	Petrol, Oils and Lubricants
PPR	prior permission required
PRM	Precision Runway Monitoring
PTD	Pilot to Dispatcher
RAMCC	Regional Air Movement Control Center
req	request
rgt tfc	right traffic
RON	Remain Overnight
rqr	require
rstd	restricted
RSRS	reduced same runway separation
rwy	runway
Sat	Saturday
SELF	Strategic Expeditionary Landing Field
Sep	September
SFA	Single Frequency Approach
sfc	surface
SFRA	Special Flight Rules Area
SOAP	Spectrometric Oil Analysis Program
SOF	Supervisor of Flying
SPB	Seaplane Base
SR	sunrise
SS	sunset
std	standard
Sun	Sunday
svc	service
tfc	traffic
thld	threshold
Thu	Thursday
tkf	take-off
tmpry	temporary
tran	transient
Tue	Tuesday
twr	tower
twy	taxiway
UC	Under Construction
USA	United States Army
USAF	United States Air Force
USCG	United States Coast Guard
USN	United States Navy
V	Defense Switching Network (telephone, formerly AUTOVON)
VFR	Visual Flight Rules
VIP	Very Important Person
VMC	Visual Meteorological Conditions
Wed	Wednesday
wx	weather

SAMPLE

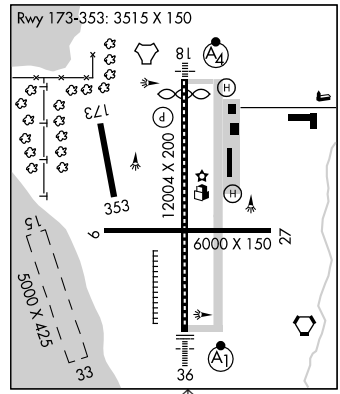
CITY NAME

AIRPORT NAME (ALTERNATE NAME) (LTS) (KLTS) CIV/MIL 3 N UTC–6(–5DT) N34°41.93′ W99°20.20′ **JACKSONVILLE**
200 B S4 **FUEL** 100 0X 1 TPA—1000(800) AOE Class IV, ARFF Index A NOTAM FILE ORL Not insp. **COPTER**
H–4G, L–19C
IAP, DIAP, AD

(21) **RWY 18–36:** H12004X200 (ASPH–CONC–GRVD)
S–90, D–160, DT–300 PCN 80 R/B/W/T HIRL CL
RWY 18: LDIN. MALSF. TDZL. REIL. PAPI(P2R)—GA 3.0° TCH 36′.
Thld dsplcd 300′. Trees. Rgt tfc. 0.3% up.
RWY 36: ALSF1. 0.4% down.
RWY 09–27: H6000X150 (ASPH) MIRL
RWY 173–353: H3515X150 (ASPH–PFC) AUW PCN 59 F/A/W/T
LAND AND HOLD SHORT OPERATIONS

LANDING	HOLD SHORT POINT	DIST AVBL
RWY 18	09–27	6500
RWY 36	09–27	5400

RUNWAY DECLARED DISTANCE INFORMATION
RWY 18: TORA–12004 TODA–12704 ASDA–11704 LDA–11504
RWY 36: TORA–12004 TODA–12004 ASDA–12004 LDA–11704



(22) **ARRESTING GEAR/SYSTEM**
RWY 18 → HOOK E5 (65′ OVRN) BAK–14 BAK–12B (1650′)
BAK–14 BAK–12 (B) (1087′) HOOK E5 (74′ OVRN) ← **RWY 36**

(23) **MILITARY SERVICE: A–GEAR** E–5 connected on dep end, disconnected on apch end. **JASU** 3(AM32A–60) 2(A/M32A–86)

(24)

(25) **FUEL** J8(Mil) (NC–100, A) **FLUID** W SP PRESAIR LOX (26)

OIL 0–128 **TRAN ALERT** Avbl 1300–0200Z‡, svc limited weekends.

(27) (28)

(10)

(29) **AIRPORT REMARKS:** Special Air Traffic Rules—Part 93, see Regulatory Notices. Attended 1200–0300Z‡. Parachute Jumping. Deer invof arpt. Heavy jumbo jet training surface to 9000′. Twy A clsd indef. Flight Notification Service (ADCUS) avbl.

(30) **MILITARY REMARKS: ANG** PPR/Official Business Only. Base OPS DSN 638–4390, C503–335–4222. Ctc Base OPS 15 minutes prior to ldg and after dep. Limited tran parking.

(31) **WEATHER DATA SOURCES:** AWOS–1 120.3 (202) 426–8000. LLWAS.

(32) **COMMUNICATIONS: SFA** **ATIS** 127.25 273.5 (202) 426–8003 **UNICOM** 122.95 **PTD** 372.2
NAME FSS (ORL) on arpt. 123.65 122.65 122.2
NAME RCO 112.2T 112.1R (NAME RADIO)
Ⓡ **NAME APP/DEP CON** 128.35 257.725 (1200–0400Z‡)
TOWER 119.65 255.6 (1200–0400Z‡) **GND CON** 121.7 **GCO** 135.075 (ORLANDO CLNC) **CLNC DEL** 125.55
NAME COMD POST (GERONIMO) 311.0 321.4 6761 **PMSV METRO** 239.8 **NAME OPS** 257.5

(33) **AIRSPACE: CLASS B** See VFR Terminal Area Chart.

(34) **RADIO AIDS TO NAVIGATION:** NOTAM FILE ORL. VHF/DF ctc FSS.
(H) VORTAC 112.2 MCO Chan 59 N28°32.55′ W81°20.12′ at fld. 1110/8E.
(H) TACAN Chan 29 CBU (109.2) N28°32.65′ W81°21.12′ at fld. 1115/8E.
HERNY NDB (LOM) 221 OR N28°37.40′ W81°21.05′ 177° 5.4 NM to fld.
ILS/DME 108.5 I–ORL Chan 22 Rwy 18. Class IIE. LOM HERNY NDB.
ASR/PAR (1200–0400Z‡)

(35) **COMM/NAV/WEATHER REMARKS:** Emerg frequency 121.5 not avbl at twr.

HELIPAD H1: H100X75 (ASPH)
HELIPAD H2: H60X60 (ASPH)
HELIPORT REMARKS: Helipad H1 lctd on general aviation side and H2 lctd on air carrier side of arpt.

(1)

187 TPA 1000(813)
WATERWAY 15–33: 5000X425 (WATER)
SEAPLANE REMARKS: Birds roosting and feeding areas along river banks. Seaplanes operating adjacent to SW side of arpt not visible from twr and are required to ctc twr.

All bearings and radials are magnetic unless otherwise specified.
All mileages are nautical unless otherwise noted.
All times are Coordinated Universal Time (UTC) except as noted.
All elevations are in feet above/below Mean Sea Level (MSL) unless otherwise noted.
The horizontal reference datum of this publication is North American Datum of 1983 (NAD83), which for charting purposes is considered equivalent to World Geodetic System 1984 (WGS 84).

(10)

SKETCH LEGEND

RUNWAYS/LANDING AREAS

Hard Surfaced

Metal Surface

Sod, Gravel, etc.

Light Plane, ...
Ski Landing Area or Water

Under Construction

Closed

Helicopter Landings Area (H)

Displaced Threshold

Taxiway, Apron and Stopways . .

RADIO AIDS TO NAVIGATION

VORTAC . . .

VOR

VOR/DME . .

NDB

TACAN

NDB/DME

MISCELLANEOUS AERONAUTICAL FEATURES

Airport Beacon

Wind Cone

Landing Tee

Tetrahedron

Control Tower

MISCELLANEOUS BASE AND CULTURAL FEATURES

Buildings

Power Lines —T——T—

Fence

Towers

Tanks

Oil Well

Smoke Stack

Obstruction 5812

Controlling Obstruction +5812

Trees

Populated Places

Cuts and Fills Cut Fill

Cliffs and Depressions . .

Ditch

Hill

APPROACH LIGHTING SYSTEMS

A dot " • " portrayed with approach lighting letter identifier indicates sequenced flashing lights (F) installed with the approach lighting system e.g. (A1) Negative symbology, e.g., (A1) (V) indicates Pilot Controlled Lighting (PCL).

Runway Centerline Lighting

(A) Approach Lighting System ALSF-2 . .

(A1) Approach Lighting System ALSF-1 . .

(A2) Short Approach Lighting System SALS/SALSF

(A3) Simplified Short Approach Lighting System (SSALR) with RAIL

(A4) Medium Intensity Approach Lighting System (MALS and MALSF)/(SSALS and SSALF)

(A5) Medium Intensity Approach Lighting System (MALSR) and RAIL

Omnidirectional Approach Lighting System (ODALS)

(D) Navy Parallel Row and Cross Bar . . .

(‡) Air Force Overrun

(V) Visual Approach Slope Indicator with Standard Threshold Clearance provided

(V2) Pulsating Visual Approach Slope Indicator (PVASI)

(V3) Visual Approach Slope Indicator with a threshold crossing height to accomodate long bodied or jumbo aircraft

(V4) Tri-color Visual Approach Slope Indicator (TRCV)

(V5) Approach Path Alignment Panel (APAP)

(P) Precision Approach Path Indicator (PAPI)

LEGEND

This directory is a listing of data on record with the FAA on all open to the public airports, military facilities and selected private use facilities specifically requested by the Department of Defense (DoD) for which a DoD Instrument Approach Procedure has been published in the U.S. Terminal Procedures Publication. Additionally this listing contains data for associated terminal control facilities, air route traffic control centers, and radio aids to navigation within the conterminous United States, Puerto Rico and the Virgin Islands. Joint civil/military and civil airports are listed alphabetically by state, associated city and airport name and cross-referenced by airport name. Military facilities are listed alphabetically by state and official airport name and cross-referenced by associated city name. Navaids, flight service stations and remote communication outlets that are associated with an airport, but with a different name, are listed alphabetically under their own name, as well as under the airport with which they are associated.

The listing of an open to the public airport in this directory merely indicates the airport operator's willingness to accommodate transient aircraft, and does not represent that the facility conforms with any Federal or local standards, or that it has been approved for use on the part of the general public. Military and private use facilities published in this directory are open to civil pilots only in an emergency or with prior permission. See Special Notice Section, Civil Use of Military Fields.

The information on obstructions is taken from reports submitted to the FAA. Obstruction data has not been verified in all cases. Pilots are cautioned that objects not indicated in this tabulation (or on the airports sketches and/or charts) may exist which can create a hazard to flight operation. Detailed specifics concerning services and facilities tabulated within this directory are contained in the Aeronautical Information Manual, Basic Flight Information and ATC Procedures.

The legend items that follow explain in detail the contents of this Directory and are keyed to the circled numbers on the sample on the preceding pages.

(1) CITY/AIRPORT NAME

Civil and joint civil/military airports and facilities in this directory are listed alphabetically by state and associated city. Where the city name is different from the airport name the city name will appear on the line above the airport name. Airports with the same associated city name will be listed alphabetically by airport name and will be separated by a dashed rule line. A solid rule line will separate all others. FAA approved helipads and seaplane landing areas associated with a land airport will be separated by a dotted line. Military airports are listed alphabetically by state and official airport name.

(2) ALTERNATE NAME

Alternate names, if any, will be shown in parentheses.

(3) LOCATION IDENTIFIER

The location identifier is a three or four character FAA code followed by a four-character ICAO code assigned to airports. ICAO codes will only be published at joint civil/military, and military facilities. If two different military codes are assigned, both codes will be shown with the primary operating agency's code listed first. These identifiers are used by ATC in lieu of the airport name in flight plans, flight strips and other written records and computer operations. Zeros will appear with a slash to differentiate them from the letter ''O''.

(4) OPERATING AGENCY

Airports within this directory are classified into two categories, Military/Federal Government and Civil airports open to the general public, plus selected private use airports. The operating agency is shown for military, private use and joint civil/military airports. The operating agency is shown by an abbreviation as listed below. When an organization is a tenant, the abbreviation is enclosed in parenthesis. No classification indicates the airport is open to the general public with no military tenant.

A	US Army	MC	Marine Corps
AFRC	Air Force Reserve Command	N	Navy
AF	US Air Force	NAF	Naval Air Facility
ANG	Air National Guard	NAS	Naval Air Station
AR	US Army Reserve	NASA	National Air and Space Administration
ARNG	US Army National Guard	P	US Civil Airport Wherein Permit Covers Use by Transient Military Aircraft
CG	US Coast Guard		
CIV/MIL	Joint Use Civil/Military	PVT	Private Use Only (Closed to the Public)
DND	Department of National Defense Canada		

(5) AIRPORT LOCATION

Airport location is expressed as distance and direction from the center of the associated city in nautical miles and cardinal points, e.g., 4 NE.

(6) TIME CONVERSION

Hours of operation of all facilities are expressed in Coordinated Universal Time (UTC) and shown as ''Z'' time. The directory indicates the number of hours to be subtracted from UTC to obtain local standard time and local daylight saving time UTC–5(–4DT). The symbol ‡ indicates that during periods of Daylight Saving Time effective hours will be one hour earlier than shown. In those areas where daylight saving time is not observed the (–4DT) and ‡ will not be shown. Daylight saving time is in effect from 0200 local time the second Sunday in March to 0200 local time the first Sunday in November. Canada and all U.S. Conterminous States observe daylight saving time except Arizona and Puerto Rico, and the Virgin Islands. If the state observes daylight saving time and the operating times are other than daylight saving times, the operating hours will include the dates, times and no ‡ symbol will be shown, i.e., April 15–Aug 31 0630–1700Z, Sep 1–Apr 14 0600–1700Z.

⑦ GEOGRAPHIC POSITION OF AIRPORT—AIRPORT REFERENCE POINT (ARP)

Positions are shown as hemisphere, degrees, minutes and hundredths of a minute and represent the approximate geometric center of all usable runway surfaces.

⑧ CHARTS

Charts refer to the Sectional Chart and Low and High Altitude Enroute Chart and panel on which the airport or facility is located. Helicopter Chart locations will be indicated as COPTER. IFR Gulf of Mexico West and IFR Gulf of Mexico Central will be depicted as GOMW and GOMC.

⑨ INSTRUMENT APPROACH PROCEDURES, AIRPORT DIAGRAMS

IAP indicates an airport for which a prescribed (Public Use) FAA Instrument Approach Procedure has been published. DIAP indicates an airport for which a prescribed DoD Instrument Approach Procedure has been published in the U.S. Terminal Procedures. See the Special Notice Section of this directory, Civil Use of Military Fields and the Aeronautical Information Manual 5–4–5 Instrument Approach Procedure Charts for additional information. AD indicates an airport for which an airport diagram has been published. Airport diagrams are located in the back of each A/FD volume alphabetically by associated city and airport name.

⑩ AIRPORT SKETCH

The airport sketch, when provided, depicts the airport and related topographical information as seen from the air and should be used in conjunction with the text. It is intended as a guide for pilots in VFR conditions. Symbology that is not self-explanatory will be reflected in the sketch legend. The airport sketch will be oriented with True North at the top. Airport sketches will be added incrementally.

⑪ ELEVATION

The highest point of an airport's usable runways measured in feet from mean sea level. When elevation is sea level it will be indicated as ''00''. When elevation is below sea level a minus ''−'' sign will precede the figure.

⑫ ROTATING LIGHT BEACON

B indicates rotating beacon is available. Rotating beacons operate sunset to sunrise unless otherwise indicated in the AIRPORT REMARKS or MILITARY REMARKS segment of the airport entry.

⑬ SERVICING—CIVIL

S1: Minor airframe repairs.
S2: Minor airframe and minor powerplant repairs.
S3: Major airframe and minor powerplant repairs.
S4: Major airframe and major powerplant repairs.
S5: Major airframe repairs.
S6: Minor airframe and major powerplant repairs.
S7: Major powerplant repairs.
S8: Minor powerplant repairs.

⑭ FUEL

CODE	FUEL
80	Grade 80 gasoline (Red)
100	Grade 100 gasoline (Green)
100LL	100LL gasoline (low lead) (Blue)
115	Grade 115 gasoline (115/145 military specification) (Purple)
A	Jet A, Kerosene, without FS–II*, FP** minus 40° C.
A+	Jet A, Kerosene, with FS–II*, FP** minus 40°C.
A1	Jet A–1, Kerosene, without FS–II*, FP** minus 47°C.
A1+	Jet A–1, Kerosene with FS–II*, FP** minus 47° C.
B	Jet B, Wide-cut, turbine fuel without FS–II*, FP** minus 50° C.
B+	Jet B, Wide-cut, turbine fuel with FS–II*, FP** minus 50° C.
J4 (JP4)	(JP–4 military specification) FP** minus 58° C.
J5 (JP5)	(JP–5 military specification) Kerosene with FS–11, FP** minus 46°C.
J8 (JP8)	(JP–8 military specification) Jet A–1, Kerosene with FS–II*, FP** minus 47°C.
J8+100	(JP–8 military specification) Jet A–1, Kerosene with FS–II*, FP** minus 47°C, with-fuel additive package that improves thermo stability characteristics of JP–8.
J	(Jet Fuel Type Unknown)
MOGAS	Automobile gasoline which is to be used as aircraft fuel.

*(Fuel System Icing Inhibitor)
**(Freeze Point)

NOTE: Certain automobile gasoline may be used in specific aircraft engines if a FAA supplemental type certificate has been obtained. Automobile gasoline, which is to be used in aircraft engines, will be identified as ''MOGAS'', however, the grade/type and other octane rating will not be published.

Data shown on fuel availability represents the most recent information the publisher has been able to acquire. Because of a variety of factors, the fuel listed may not always be obtainable by transient civil pilots. Confirmation of availability of fuel should be made directly with fuel suppliers at locations where refueling is planned.

⑮ OXYGEN—CIVIL

OX 1 High Pressure
OX 2 Low Pressure
OX 3 High Pressure—Replacement Bottles
OX 4 Low Pressure—Replacement Bottles

⑯ TRAFFIC PATTERN ALTITUDE

Traffic Pattern Altitude (TPA)—The first figure shown is TPA above mean sea level. The second figure in parentheses is TPA above airport elevation. Multiple TPA shall be shown as ''TPA—See Remarks'' and detailed information shall be shown in the Airport or Military Remarks Section. Traffic pattern data for USAF bases, USN facilities, and U.S. Army airports (including those on which ACC or U.S. Army is a tenant) that deviate from standard pattern altitudes shall be shown in Military Remarks.

⑰ AIRPORT OF ENTRY, LANDING RIGHTS, AND CUSTOMS USER FEE AIRPORTS

U.S. CUSTOMS USER FEE AIRPORT—Private Aircraft operators are frequently required to pay the costs associated with customs processing.

AOE—Airport of Entry. A customs Airport of Entry where permission from U.S. Customs is not required to land. However, at least one hour advance notice of arrival is required.

LRA—Landing Rights Airport. Application for permission to land must be submitted in advance to U.S. Customs. At least one hour advance notice of arrival is required.

NOTE: Advance notice of arrival at both an AOE and LRA airport may be included in the flight plan when filed in Canada or Mexico. Where Flight Notification Service (ADCUS) is available the airport remark will indicate this service. This notice will also be treated as an application for permission to land in the case of an LRA. Although advance notice of arrival may be relayed to Customs through Mexico, Canada, and U.S. Communications facilities by flight plan, the aircraft operator is solely responsible for ensuring that Customs receives the notification. (See Customs, Immigration and Naturalization, Public Health and Agriculture Department requirements in the International Flight Information Manual for further details.)

US Customs Air and Sea Ports, Inspectors and Agents

Northeast Sector (New England and Atlantic States—ME to MD)	407–975–1740
Southeast Sector (Atlantic States—DC, WV, VA to FL)	407–975–1780
Central Sector (Interior of the US, including Gulf states—MS, AL, LA)	407–975–1760
Southwest East Sector (OK and eastern TX)	407–975–1840
Southwest West Sector (Western TX, NM and AZ)	407–975–1820
Pacific Sector (WA, OR, CA, HI and AK)	407–975–1800

⑱ CERTIFICATED AIRPORT (14 CFR PART 139)

Airports serving Department of Transportation certified carriers and certified under 14 CFR part 139 are indicated by the Class and the ARFF Index; e.g. Class I, ARFF Index A, which relates to the availability of crash, fire, rescue equipment. Class I airports can have an ARFF Index A through E, depending on the aircraft length and scheduled departures. Class II, III, and IV will always carry an Index A.

14 CFR PART 139 CERTIFICATED AIRPORTS
AIRPORT CLASSIFICATIONS

Type of Air Carrier Operation	Class I	Class II	Class III	Class IV
Scheduled Air Carrier Aircraft with 31 or more passenger seats	X			
Unscheduled Air Carrier Aircraft with 31 or more passengers seats	X	X		X
Scheduled Air Carrier Aircraft with 10 to 30 passenger seats	X	X	X	

14 CFR–PART 139 CERTIFICATED AIRPORTS

INDICES AND AIRCRAFT RESCUE AND FIRE FIGHTING EQUIPMENT REQUIREMENTS

Airport Index	*Required No. Vehicles*	*Aircraft Length*	*Scheduled Departures*	*Agent + Water for Foam*
A	1	<90′	≥1	500#DC or HALON 1211 or 450#DC + 100 gal H_2O
B	1 or 2	≥90′, <126′	≥5	Index A + 1500 gal H_2O
		≥126′, <159′	<5	
C	2 or 3	≥126′, <159′	≥5	Index A + 3000 gal H_2O
		≥159′, <200′	<5	
D	3	≥159′, <200′		Index A + 4000 gal H_2O
		>200′	<5	
E	3	≥200′	≥5	Index A + 6000 gal H_2O

> Greater Than; < Less Than; ≥ Equal or Greater Than; ≤ Equal or Less Than; H_2O–Water; DC–Dry Chemical.

NOTE: The listing of ARFF index does not necessarily assure coverage for non-air carrier operations or at other than prescribed times for air carrier. ARFF Index Ltd.—indicates ARFF coverage may or may not be available, for information contact airport manager prior to flight.

⑲ NOTAM SERVICE

All public use landing areas are provided NOTAM ''D'' (distant dissemination) and NOTAM ''L'' (local dissemination) service. Airport NOTAM file identifier is shown for individual airports, e.g. ''NOTAM FILE IAD''. See AIM, Basic Flight Information and

ATC Procedures for detailed description of NOTAM's. Current NOTAMs are available from Flight Service Stations at 1–800–WX–BRIEF. Real time Military NOTAMs are available using the DoD Internet NOTAM Distribution System (DINS) www.notams.jcs.mil.

⑳ FAA INSPECTION

All airports not inspected by FAA will be identified by the note: Not insp. This indicates that the airport information has been provided by the owner or operator of the field.

㉑ RUNWAY DATA

Runway information is shown on two lines. That information common to the entire runway is shown on the first line while information concerning the runway ends is shown on the second or following line. Runway direction, surface, length, width, weight bearing capacity, lighting, and slope, when available are shown for each runway. Multiple runways are shown with the longest runway first. Direction, length, width, and lighting are shown for sea-lanes. The full dimensions of helipads are shown, e.g., 50X150. Runway data that requires clarification will be placed in the remarks section.

RUNWAY DESIGNATION

Runways are normally numbered in relation to their magnetic orientation rounded off to the nearest 10 degrees. Parallel runways can be designated L (left)/R (right)/C (center). Runways may be designated as Ultralight or assault strips. Assault strips are shown by magnetic bearing.

RUNWAY DIMENSIONS

Runway length and width are shown in feet. Length shown is runway end to end including displaced thresholds, but excluding those areas designed as overruns.

RUNWAY SURFACE AND LENGTH

Runway lengths prefixed by the letter ''H'' indicate that the runways are hard surfaced (concrete, asphalt, or part asphalt–concrete). If the runway length is not prefixed, the surface is sod, clay, etc. The runway surface composition is indicated in parentheses after runway length as follows:

(AFSC)—Aggregate friction seal coat
(ASPH)—Asphalt
(CONC)—Concrete
(DIRT)—Dirt
(GRVD)—Grooved
(GRVL)—Gravel, or cinders
(MATS)—Pierced steel planking, landing mats, membranes
(PEM)—Part concrete, part asphalt
(PFC)—Porous friction courses
(PSP)—Pierced steel plank
(RFSC)—Rubberized friction seal coat
(TURF)—Turf
(TRTD)—Treated
(WC)—Wire combed

RUNWAY WEIGHT BEARING CAPACITY

Runway strength data shown in this publication is derived from available information and is a realistic estimate of capability at an average level of activity. It is not intended as a maximum allowable weight or as an operating limitation. Many airport pavements are capable of supporting limited operations with gross weights in excess of the published figures. Permissible operating weights, insofar as runway strengths are concerned, are a matter of agreement between the owner and user. When desiring to operate into any airport at weights in excess of those published in the publication, users should contact the airport management for permission. Runway strength figures are shown in thousand of pounds, with the last three figures being omitted. Add 000 to figure following S, D, 2S, 2T, AUW, SWL, etc., for gross weight capacity. A blank space following the letter designator is used to indicate the runway can sustain aircraft with this type landing gear, although definite runway weight bearing capacity figures are not available, e.g., S, D. Applicable codes for typical gear configurations with S=Single, D=Dual, T=Triple and Q=Quadruple:

CURRENT	NEW	NEW DESCRIPTION
S	S	Single wheel type landing gear (DC3), (C47), (F15), etc.
D	D	Dual wheel type landing gear (BE1900), (B737), (A319), etc.
T	D	Dual wheel type landing gear (P3, C9).
ST	2S	Two single wheels in tandem type landing gear (C130).
TRT	2T	Two triple wheels in tandem type landing gear (C17), etc.
DT	2D	Two dual wheels in tandem type landing gear (B707), etc.
TT	2D	Two dual wheels in tandem type landing gear (B757, KC135).
SBTT	2D/D1	Two dual wheels in tandem/dual wheel body gear type landing gear (KC10).
None	2D/2D1	Two dual wheels in tandem/two dual wheels in tandem body gear type landing gear (A340–600).
DDT	2D/2D2	Two dual wheels in tandem/two dual wheels in double tandem body gear type landing gear (B747, E4).
TTT	3D	Three dual wheels in tandem type landing gear (B777), etc.
TT	D2	Dual wheel gear two struts per side main gear type landing gear (B52).
TDT	C5	Complex dual wheel and quadruple wheel combination landing gear (C5).

AUW—All up weight. Maximum weight bearing capacity for any aircraft irrespective of landing gear configuration.
SWL—Single Wheel Loading. (This includes information submitted in terms of Equivalent Single Wheel Loading (ESWL) and Single Isolated Wheel Loading).
PSI—Pounds per square inch. PSI is the actual figure expressing maximum pounds per square inch runway will support, e.g., (SWL 000/PSI 535).

Omission of weight bearing capacity indicates information unknown.

The ACN/PCN System is the ICAO standard method of reporting pavement strength for pavements with bearing strengths greater than 12,500 pounds. The Pavement Classification Number (PCN) is established by an engineering assessment of the runway. The PCN is for use in conjunction with an Aircraft Classification Number (ACN). Consult the Aircraft Flight Manual, Flight Information Handbook, or other appropriate source for ACN tables or charts. Currently, ACN data may not be available for all aircraft. If an ACN table or chart is available, the ACN can be calculated by taking into account the aircraft weight, the pavement type, and the subgrade category. For runways that have been evaluated under the ACN/PCN system, the PCN will be shown as a five-part code (e.g. PCN 80 R/B/W/T). Details of the coded format are as follows:

(1) The PCN NUMBER—The reported PCN indicates that an aircraft with an ACN equal or less than the reported PCN can operate on the pavement subject to any limitation on the tire pressure.

(2) The type of pavement:
R — Rigid
F — Flexible

(3) The pavement subgrade category:
A — High
B — Medium
C — Low
D — Ultra-low

(4) The maximum tire pressure authorized for the pavement:
W — High, no limit
X — Medium, limited to 217 psi
Y — Low, limited to 145 psi
Z — Very low, limited to 73 psi

(5) Pavement evaluation method:
T — Technical evaluation
U — By experience of aircraft using the pavement

NOTE: Prior permission from the airport controlling authority is required when the ACN of the aircraft exceeds the published PCN or aircraft tire pressure exceeds the published limits.

RUNWAY LIGHTING

Lights are in operation sunset to sunrise. Lighting available by prior arrangement only or operating part of the night and/or pilot controlled lighting with specific operating hours are indicated under airport or military remarks. At USN/USMC facilities lights are available only during airport hours of operation. Since obstructions are usually lighted, obstruction lighting is not included in this code. Unlighted obstructions on or surrounding an airport will be noted in airport or military remarks. Runway lights nonstandard (NSTD) are systems for which the light fixtures are not FAA approved L-800 series: color, intensity, or spacing does not meet FAA standards. Nonstandard runway lights, VASI, or any other system not listed below will be shown in airport remarks or military service. Temporary, emergency or limited runway edge lighting such as flares, smudge pots, lanterns or portable runway lights will also be shown in airport remarks or military service. Types of lighting are shown with the runway or runway end they serve.

NSTD—Light system fails to meet FAA standards.
LIRL—Low Intensity Runway Lights.
MIRL—Medium Intensity Runway Lights.
HIRL—High Intensity Runway Lights.
RAIL—Runway Alignment Indicator Lights.
REIL—Runway End Identifier Lights.
CL—Centerline Lights.
TDZL—Touchdown Zone Lights.
ODALS—Omni Directional Approach Lighting System.
AF OVRN—Air Force Overrun 1000′ Standard Approach Lighting System.
LDIN—Lead-In Lighting System.
MALS—Medium Intensity Approach Lighting System.
MALSF—Medium Intensity Approach Lighting System with Sequenced Flashing Lights.
MALSR—Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights.
SALS—Short Approach Lighting System.
SALSF—Short Approach Lighting System with Sequenced Flashing Lights.
SSALS—Simplified Short Approach Lighting System.
SSALF—Simplified Short Approach Lighting System with Sequenced Flashing Lights.
SSALR—Simplified Short Approach Lighting System with Runway Alignment Indicator Lights.
ALSAF—High Intensity Approach Lighting System with Sequenced Flashing Lights.
ALSF1—High Intensity Approach Lighting System with Sequenced Flashing Lights, Category I, Configuration.
ALSF2—High Intensity Approach Lighting System with Sequenced Flashing Lights, Category II, Configuration.
SF—Sequenced Flashing Lights.
OLS—Optical Landing System.
WAVE–OFF.

NOTE: Civil ALSF2 may be operated as SSALR during favorable weather conditions. When runway edge lights are positioned more than 10 feet from the edge of the usable runway surface a remark will be added in the ''Remarks'' portion of the airport entry. This is applicable to Air Force, Air National Guard and Air Force Reserve Bases, and those joint civil/military airfields on which they are tenants.

VISUAL GLIDESLOPE INDICATORS

APAP—A system of panels, which may or may not be lighted, used for alignment of approach path.

PNIL	APAP on left side of runway	PNIR	APAP on right side of runway

PAPI—Precision Approach Path Indicator

P2L	2-identical light units placed on left side of runway	P4L	4-identical light units placed on left side of runway
P2R	2-identical light units placed on right side of runway	P4R	4-identical light units placed on right side of runway

PVASI—Pulsating/steady burning visual approach slope indicator, normally a single light unit projecting two colors.

PSIL	PVASI on left side of runway	PSIR	PVASI on right side of runway

SAVASI—Simplified Abbreviated Visual Approach Slope Indicator

S2L	2-box SAVASI on left side of runway	S2R	2-box SAVASI on right side of runway

TRCV—Tri-color visual approach slope indicator, normally a single light unit projecting three colors.

TRIL	TRCV on left side of runway	TRIR	TRCV on right side of runway

VASI—Visual Approach Slope Indicator

V2L	2-box VASI on left side of runway	V6L	6-box VASI on left side of runway
V2R	2-box VASI on right side of runway	V6R	6-box VASI on right side of runway
V4L	4-box VASI on left side of runway	V12	12-box VASI on both sides of runway
V4R	4-box VASI on right side of runway	V16	16-box VASI on both sides of runway

NOTE: Approach slope angle and threshold crossing height will be shown when available; i.e., –GA 3.5° TCH 37′.

PILOT CONTROL OF AIRPORT LIGHTING

Key Mike	Function
7 times within 5 seconds	Highest intensity available
5 times within 5 seconds	Medium or lower intensity (Lower REIL or REIL-Off)
3 times within 5 seconds	Lowest intensity available (Lower REIL or REIL-Off)

Available systems will be indicated in the airport or military remarks, e.g., ACTIVATE HIRL Rwy 07–25, MALSR Rwy 07, and VASI Rwy 07—122.8.

Where the airport is not served by an instrument approach procedure and/or has an independent type system of different specification installed by the airport sponsor, descriptions of the type lights, method of control, and operating frequency will be explained in clear text. See AIM, ''Basic Flight Information and ATC Procedures,'' for detailed description of pilot control of airport lighting.

RUNWAY SLOPE

When available, runway slope data will only be provided for those airports with an approved FAA instrument approach procedure. Runway slope will be shown only when it is 0.3 percent or greater. On runways less than 8000 feet, the direction of the slope up will be indicated, e.g., 0.3% up NW. On runways 8000 feet or greater, the slope will be shown (up or down) on the runway end line, e.g., RWY 13: 0.3% up., RWY 21: Pole. Rgt tfc. 0.4% down.

RUNWAY END DATA

Information pertaining to the runway approach end such as approach lights, touchdown zone lights, runway end identification lights, visual glideslope indicators, displaced thresholds, controlling obstruction, and right hand traffic pattern, will be shown on the specific runway end. ''Rgt tfc''—Right traffic indicates right turns should be made on landing and takeoff for specified runway end.

LAND AND HOLD SHORT OPERATIONS (LAHSO)

LAHSO is an acronym for ''Land and Hold Short Operations.'' These operations include landing and holding short of an intersection runway, an intersecting taxiway, or other predetermined points on the runway other than a runway or taxiway. Measured distance represents the available landing distance on the landing runway, in feet.

Specific questions regarding these distances should be referred to the air traffic manager of the facility concerned. The Aeronautical Information Manual contains specific details on hold–short operations and markings.

RUNWAY DECLARED DISTANCE INFORMATION

TORA—Take-off Run Available. The length of runway declared available and suitable for the ground run of an aeroplane take–off.

TODA—Take-off Distance Available. The length of the take–off run available plus the length of the clearway, if provided.

ASDA—Accelerate-Stop Distance Available. The length of the take–off run available plus the length of the stopway, if provided.

LDA—Landing Distance Available. The length of runway which is declared available and suitable for the ground run of an aeroplane landing.

(22) ARRESTING GEAR/SYSTEMS

Arresting gear is shown as it is located on the runway. The a–gear distance from the end of the appropriate runway (or into the overrun) is indicated in parentheses. A–Gear which has a bi–direction capability and can be utilized for emergency approach end engagement is indicated by a (B). The direction of engaging device is indicated by an arrow. Up to 15 minutes advance notice may be required for rigging A–Gear for approach and engagement. Airport listing may show availability of other than US Systems. This information is provided for emergency requirements only. Refer to current aircraft operating manuals for specific engagement weight and speed criteria based on aircraft structural restrictions and arresting system limitations.

Following is a list of current systems referenced in this publication identified by both Air Force and Navy terminology:

BI–DIRECTIONAL CABLE (B)

TYPE	DESCRIPTION
BAK–9	Rotary friction brake.
BAK–12A	Standard BAK–12 with 950 foot run out, 1–inch cable and 40,000 pound weight setting. Rotary friction brake.
BAK–12B	Extended BAK–12 with 1200 foot run, 1¼ inch Cable and 50,000 pounds weight setting. Rotary friction brake.
E28	Rotary Hydraulic (Water Brake).
M21	Rotary Hydraulic (Water Brake) Mobile.

The following device is used in conjunction with some aircraft arresting systems:

BAK–14	A device that raises a hook cable out of a slot in the runway surface and is remotely positioned for engagement by the tower on request. (In addition to personnel reaction time, the system requires up to five seconds to fully raise the cable.)
H	A device that raises a hook cable out of a slot in the runway surface and is remotely positioned for engagement by the tower on request. (In addition to personnel reaction time, the system requires up to one and one–half seconds to fully raise the cable.)

UNI–DIRECTIONAL CABLE

TYPE	DESCRIPTION
MB60	Textile brake—an emergency one–time use, modular braking system employing the tearing of specially woven textile straps to absorb the kinetic energy.
E5/E5–1/E5–3	Chain Type. At USN/USMC stations E–5 A–GEAR systems are rated, e.g., E–5 RATING–13R–1100 HW (DRY), 31L/R–1200 STD (WET). This rating is a function of the A–GEAR chain weight and length and is used to determine the maximum aircraft engaging speed. A dry rating applies to a stabilized surface (dry or wet) while a wet rating takes into account the amount (if any) of wet overrun that is not capable of withstanding the aircraft weight. These ratings are published under Military Service.

FOREIGN CABLE

TYPE	DESCRIPTION	US EQUIVALENT
44B–3H	Rotary Hydraulic) (Water Brake)	
CHAG	Chain	E–5

UNI–DIRECTIONAL BARRIER

TYPE	DESCRIPTION
MA–1A	Web barrier between stanchions attached to a chain energy absorber.
BAK–15	Web barrier between stanchions attached to an energy absorber (water squeezer, rotary friction, chain). Designed for wing engagement.

NOTE: Landing short of the runway threshold on a runway with a BAK–15 in the underrun is a significant hazard. The barrier in the down position still protrudes several inches above the underrun. Aircraft contact with the barrier short of the runway threshold can cause damage to the barrier and substantial damage to the aircraft.

OTHER

TYPE	DESCRIPTION
EMAS	Engineered Material Arresting System, located beyond the departure end of the runway, consisting of high energy absorbing materials which will crush under the weight of an aircraft.

(23) MILITARY SERVICE

Specific military services available at the airport are listed under this general heading. Remarks applicable to any military service are shown in the individual service listing.

(24) JET AIRCRAFT STARTING UNITS (JASU)

The numeral preceding the type of unit indicates the number of units available. The absence of the numeral indicates ten or more units available. If the number of units is unknown, the number one will be shown. Absence of JASU designation indicates non–availability.

The following is a list of current JASU systems referenced in this publication:

USAF JASU (For variations in technical data, refer to T.O. 35–1–7.)

ELECTRICAL STARTING UNITS:

A/M32A–86	AC: 115/200v, 3 phase, 90 kva, 0.8 pf, 4 wire DC: 28v, 1500 amp, 72 kw (with TR pack)
MC–1A	AC: 115/208v, 400 cycle, 3 phase, 37.5 kva, 0.8 pf, 108 amp, 4 wire DC: 28v, 500 amp, 14 kw
MD–3	AC: 115/208v, 400 cycle, 3 phase, 60 kva, 0.75 pf, 4 wire DC: 28v, 1500 amp, 45 kw, split bus
MD–3A	AC: 115/208v, 400 cycle, 3 phase, 60 kva, 0.75 pf, 4 wire DC: 28v, 1500 amp, 45 kw, split bus
MD–3M	AC: 115/208v, 400 cycle, 3 phase, 60 kva, 0.75 pf, 4 wire DC: 28v, 500 amp, 15 kw

MD–4	AC: 120/208v, 400 cycle, 3 phase, 62.5 kva, 0.8 pf, 175 amp, ''WYE'' neutral ground, 4 wire, 120v, 400 cycle, 3 phase, 62.5 kva, 0.8 pf, 303 amp, ''DELTA'' 3 wire, 120v, 400 cycle, 1 phase, 62.5 kva, 0.8 pf, 520 amp, 2 wire
AIR STARTING UNITS	
AM32–95	150 +/− 5 lb/min (2055 +/− 68 cfm) at 51 +/− 2 psia
AM32A–95	150 +/− 5 lb/min @ 49 +/− 2 psia (35 +/− 2 psig)
LASS	150 +/− 5 lb/min @ 49 +/− 2 psia
MA–1A	82 lb/min (1123 cfm) at 130° air inlet temp, 45 psia (min) air outlet press
MC–1	15 cfm, 3500 psia
MC–1A	15 cfm, 3500 psia
MC–2A	15 cfm, 200 psia
MC–11	8,000 cu in cap, 4000 psig, 15 cfm
COMBINED AIR AND ELECTRICAL STARTING UNITS:	
AGPU	AC: 115/200v, 400 cycle, 3 phase, 30 kw gen DC: 28v, 700 amp AIR: 60 lb/min @ 40 psig @ sea level
AM32A–60*	AIR: 120 +/− 4 lb/min (1644 +/− 55 cfm) at 49 +/− 2 psia AC: 120/208v, 400 cycle, 3 phase, 75 kva, 0.75 pf, 4 wire, 120v, 1 phase, 25 kva DC: 28v, 500 amp, 15 kw
AM32A–60A	AIR: 150 +/− 5 lb/min (2055 +/− 68 cfm at 51 +/− psia AC: 120/208v, 400 cycle, 3 phase, 75 kva, 0.75 pf, 4 wire DC: 28v, 200 amp, 5.6 kw
AM32A–60B*	AIR: 130 lb/min, 50 psia AC: 120/208v, 400 cycle, 3 phase, 75 kva, 0.75 pf, 4 wire DC: 28v, 200 amp, 5.6 kw

*NOTE: During combined air and electrical loads, the pneumatic circuitry takes preference and will limit the amount of electrical power available.

USN JASU

ELECTRICAL STARTING UNITS:	
NC–8A/A1	DC: 500 amp constant, 750 amp intermittent, 28v; AC: 60 kva @ .8 pf, 115/200v, 3 phase, 400 Hz.
NC–10A/A1/B/C	DC: 750 amp constant, 1000 amp intermittent, 28v; AC: 90 kva, 115/200v, 3 phase, 400 Hz.
AIR STARTING UNITS:	
GTC–85/GTE–85	120 lbs/min @ 45 psi.
MSU–200NAV/A/U47A–5	204 lbs/min @ 56 psia.
WELLS AIR START SYSTEM	180 lbs/min @ 75 psi or 120 lbs/min @ 45 psi. Simultaneous multiple start capability.
COMBINED AIR AND ELECTRICAL STARTING UNITS:	
NCPP–105/RCPT	180 lbs/min @ 75 psi or 120 lbs/min @ 45 psi. 700 amp, 28v DC. 120/208v, 400 Hz AC, 30 kva.
JASU (ARMY)	
59B2–1B	28v, 7.5 kw, 280 amp.
OTHER JASU	
ELECTRICAL STARTING UNITS (DND):	
CE12	AC 115/200v, 140 kva, 400 Hz, 3 phase
CE13	AC 115/200v, 60 kva, 400 Hz, 3 phase
CE14	AC/DC 115/200v, 140 kva, 400 Hz, 3 phase, 28vDC, 1500 amp
CE15	DC 22–35v, 500 amp continuous 1100 amp intermittent
CE16	DC 22–35v, 500 amp continuous 1100 amp intermittent soft start
AIR STARTING UNITS (DND):	
CA2	ASA 45.5 psig, 116.4 lb/min
COMBINED AIR AND ELECTRICAL STARTING UNITS (DND)	
CEA1	AC 120/208v, 60 kva, 400 Hz, 3 phase DC 28v, 75 amp AIR 112.5 lb/min, 47 psig
ELECTRICAL STARTING UNITS (OTHER)	
C–26	28v 45kw 115–200v 15kw 380–800 Hz 1 phase 2 wire
C–26–B, C–26–C	28v 45kw: Split Bus: 115–200v 15kw 380–800 Hz 1 phase 2 wire
E3	DC 28v/10kw
AIR STARTING UNITS (OTHER):	
A4	40 psi/2 lb/sec (LPAS Mk12, Mk12L, Mk12A, Mk1, Mk2B)
MA–1	150 Air HP, 115 lb/min 50 psia
MA–2	250 Air HP, 150 lb/min 75 psia
CARTRIDGE:	
MXU–4A	USAF

(25) FUEL—MILITARY

Fuel available through US Military Base supply, DESC Into–Plane Contracts and/or reciprocal agreement is listed first and is followed by (Mil). At commercial airports where Into–Plane contracts are in place, the name of the refueling agent is shown. Military fuel should be used first if it is available. When military fuel cannot be obtained but Into–Plane contract fuel is available, Government aircraft must refuel with the contract fuel and applicable refueling agent to avoid any breach in contract terms and conditions. Fuel not available through the above is shown preceded by NC (no contract). When fuel is obtained from NC sources, local purchase procedures must be followed. The US Military Aircraft Identaplates DD Form 1896 (Jet Fuel), DD Form 1897 (Avgas) and AF Form 1245 (Avgas) are used at military installations only. The US Government Aviation Into–Plane Reimbursement (AIR) Card (currently issued by AVCARD) is the instrument to be used to obtain fuel under a DESC Into–Plane Contract and for NC purchases if the refueling agent at the commercial airport accepts the AVCARD. A current list of contract fuel locations is available online at www.desc.dla.mil/Static/ProductsAndServices.asp; click on the Commercial Airports button.

See legend item 14 for fuel code and description.

(26) SUPPORTING FLUIDS AND SYSTEMS—MILITARY

CODE	
ADI	Anti–Detonation Injection Fluid—Reciprocating Engine Aircraft.
W	Water Thrust Augmentation—Jet Aircraft.
WAI	Water–Alcohol Injection Type, Thrust Augmentation—Jet Aircraft.
SP	Single Point Refueling.
PRESAIR	Air Compressors rated 3,000 PSI or more.
De–Ice	Anti–icing/De–icing/Defrosting Fluid (MIL–A–8243).

OXYGEN:

LPOX	Low pressure oxygen servicing.
HPOX	High pressure oxygen servicing.
LHOX	Low and high pressure oxygen servicing.
LOX	Liquid oxygen servicing.
OXRB	Oxygen replacement bottles. (Maintained primarily at Naval stations for use in acft where oxygen can be replenished only by replacement of cylinders.)
OX	Indicates oxygen servicing when type of servicing is unknown.

NOTE: Combinations of above items is used to indicate complete oxygen servicing available;

LHOXRB	Low and high pressure oxygen servicing and replacement bottles;
LPOXRB	Low pressure oxygen replacement bottles only, etc.

NOTE: Aircraft will be serviced with oxygen procured under military specifications only. Aircraft will not be serviced with medical oxygen.

NITROGEN:

LPNIT — Low pressure nitrogen servicing.
HPNIT — High pressure nitrogen servicing.
LHNIT — Low and high pressure nitrogen servicing.

(27) OIL—MILITARY

US AVIATION OILS (MIL SPECS):

CODE	GRADE, TYPE
O–113	1065, Reciprocating Engine Oil (MIL–L–6082)
O–117	1100, Reciprocating Engine Oil (MIL–L–6082)
O–117+	1100, O–117 plus cyclohexanone (MIL–L–6082)
O–123	1065, (Dispersant), Reciprocating Engine Oil (MIL–L–22851 Type III)
O–128	1100, (Dispersant), Reciprocating Engine Oil (MIL–L–22851 Type II)
O–132	1005, Jet Engine Oil (MIL–L–6081)
O–133	1010, Jet Engine Oil (MIL–L–6081)
O–147	None, MIL–L–6085A Lubricating Oil, Instrument, Synthetic
O–148	None, MIL–L–7808 (Synthetic Base) Turbine Engine Oil
O–149	None, Aircraft Turbine Engine Synthetic, 7.5c St
O–155	None, MIL–L–6086C, Aircraft, Medium Grade
O–156	None, MIL–L–23699 (Synthetic Base), Turboprop and Turboshaft Engines
JOAP/SOAP	Joint Oil Analysis Program. JOAP support is furnished during normal duty hours, other times on request. (JOAP and SOAP programs provide essentially the same service, JOAP is now the standard joint service supported program.)

(28) TRANSIENT ALERT (TRAN ALERT)—MILITARY

Tran Alert service is considered to include all services required for normal aircraft turn–around, e.g., servicing (fuel, oil, oxygen, etc.), debriefing to determine requirements for maintenance, minor maintenance, inspection and parking assistance of transient aircraft. Drag chute repack, specialized maintenance, or extensive repairs will be provided within the capabilities and priorities of the base. Delays can be anticipated after normal duty hours/holidays/weekends regardless of the hours of transient maintenance operation. Pilots should not expect aircraft to be serviced for TURN–AROUNDS during time periods when servicing or maintenance manpower is not available. In the case of airports not operated exclusively by US military, the servicing indicated by the remarks will not always be available for US military

aircraft. When transient alert services are not shown, facilities are unknown. NO PRIORITY BASIS—means that transient alert services will be provided only after all the requirements for mission/tactical assigned aircraft have been accomplished.

㉙ AIRPORT REMARKS

The Attendance Schedule is the months, days and hours the airport is actually attended. Airport attendance does not mean watchman duties or telephone accessibility, but rather an attendant or operator on duty to provide at least minimum services (e.g., repairs, fuel, transportation).

Airport Remarks have been grouped in order of applicability. Airport remarks are limited to those items of information that are determined essential for operational use, i.e., conditions of a permanent or indefinite nature and conditions that will remain in effect for more than 30 days concerning aeronautical facilities, services, maintenance available, procedures or hazards, knowledge of which is essential for safe and efficient operation of aircraft. Information concerning permanent closing of a runway or taxiway will not be shown. A note ''See Special Notices'' shall be applied within this remarks section when a special notice applicable to the entry is contained in the Special Notices section of this publication.

Parachute Jumping indicates parachute jumping areas associated with the airport. See Parachute Jumping Area section of this publication for additional Information.

Landing Fee indicates landing charges for private or non-revenue producing aircraft. In addition, fees may be charged for planes that remain over a couple of hours and buy no services, or at major airline terminals for all aircraft.

Note: Unless otherwise stated, remarks including runway ends refer to the runway's approach end.

㉚ MILITARY REMARKS

Military Remarks published at a joint Civil/Military facility are remarks that are applicable to the Military. At Military Facilities all remarks will be published under the heading Military Remarks. Remarks contained in this section may not be applicable to civil users. The first group of remarks is applicable to the primary operator of the airport. Remarks applicable to a tenant on the airport are shown preceded by the tenant organization, i.e., (A) (AF) (N) (ANG), etc. Military airports operate 24 hours unless otherwise specified. Airport operating hours are listed first (airport operating hours will only be listed if they are different than the airport attended hours or if the attended hours are unavailable) followed by pertinent remarks in order of applicability. Remarks will include information on restrictions, hazards, traffic pattern, noise abatement, customs/agriculture/immigration, and miscellaneous information applicable to the Military.

Type of restrictions:

CLOSED: When designated closed, the airport is restricted from use by all aircraft unless stated otherwise. Any closure applying to specific type of aircraft or operation will be so stated. USN/USMC/USAF airports are considered closed during non–operating hours. Closed airports may be utilized during an emergency provided there is a safe landing area.

OFFICIAL BUSINESS ONLY: The airfield is closed to all transient military aircraft for obtaining routine services such as fueling, passenger drop off or pickup, practice approaches, parking, etc. The airfield may be used by aircrews and aircraft if official government business (including civilian) must be conducted on or near the airfield and prior permission is received from the airfield manager.

AF OFFICIAL BUSINESS ONLY OR NAVY OFFICIAL BUSINESS ONLY: Indicates that the restriction applies only to service indicated.

PRIOR PERMISSION REQUIRED (PPR): Airport is closed to transient aircraft unless approval for operation is obtained from the appropriate commander through Chief, Airfield Management or Airfield Operations Officer. Official Business or PPR does not preclude the use of US Military airports as an alternate for IFR flights. If a non–US military airport is used as a weather alternate and requires a PPR, the PPR must be requested and confirmed before the flight departs. The purpose of PPR is to control volume and flow of traffic rather than to prohibit it. Prior permission is required for all aircraft requiring transient alert service outside the published transient alert duty hours. All aircraft carrying hazardous materials must obtain prior permission as outlined in AFJI 11–204, AR 95–27, OPNAVINST 3710.7.

Note: OFFICIAL BUSINESS ONLY AND PPR restrictions are not applicable to Special Air Mission (SAM) or Special Air Resource (SPAR) aircraft providing person or persons on aboard are designated Code 6 or higher as explained in AFJMAN 11–213, AR 95–11, OPNAVINST 3722–8J. Official Business Only or PPR do not preclude the use of the airport as an alternate for IFR flights.

㉛ WEATHER DATA SOURCES

Weather data sources will be listed alphabetically followed by their assigned frequencies and/or telephone number and hours of operation.

ASOS—Automated Surface Observing System. Reports the same as an AWOS–3 plus precipitation identification and intensity, and freezing rain occurrence (future enhancement).

AWOS—Automated Weather Observing System

AWOS–A—reports altimeter setting (all other information is advisory only).

AWOS–1—reports altimeter setting, wind data and usually temperature, dewpoint and density altitude.

AWOS–2—reports the same as AWOS–1 plus visibility.

AWOS–3—reports the same as AWOS–1 plus visibility and cloud/ceiling data.

See AIM, Basic Flight Information and ATC Procedures for detailed description of AWOS.

HIWAS—See RADIO AIDS TO NAVIGATION
LAWRS—Limited Aviation Weather Reporting Station where observers report cloud height, weather, obstructions to vision, temperature and dewpoint (in most cases), surface wind, altimeter and pertinent remarks.
LLWAS—indicates a Low Level Wind Shear Alert System consisting of a center field and several field perimeter anemometers.
SAWRS—identifies airports that have a Supplemental Aviation Weather Reporting Station available to pilots for current weather information.
SWSL—Supplemental Weather Service Location providing current local weather information via radio and telephone.
TDWR—indicates airports that have Terminal Doppler Weather Radar.
WSP—indicates airports that have Weather System Processor.

When the automated weather source is broadcast over an associated airport NAVAID frequency (see NAVAID line), it shall be indicated by a bold ASOS, AWOS, or HIWAS followed by the frequency, identifier and phone number, if available.

(32) COMMUNICATIONS

Airport terminal control facilities and radio communications associated with the airport shall be shown. When the call sign is not the same as the airport name the call sign will be shown. Frequencies shall normally be shown in descending order with the primary frequency listed first. Frequencies will be listed, together with sectorization indicated by outbound radials, and hours of operation. Communications will be listed in sequence as follows:

Single Frequency Approach (SFA), Common Traffic Advisory Frequency (CTAF), Automatic Terminal Information Service (ATIS) and Aeronautical Advisory Stations (UNICOM) or (AUNICOM) along with their frequency is shown, where available, on the line following the heading ''COMMUNICATIONS.'' When the CTAF and UNICOM frequencies are the same, the frequency will be shown as CTAF/UNICOM 122.8.

The FSS telephone nationwide is toll free 1–800–WX–BRIEF (1–800–992–7433). When the FSS is located on the field it will be indicated as ''on arpt''. Frequencies available at the FSS will follow in descending order. Remote Communications Outlet (RCO) providing service to the airport followed by the frequency and FSS RADIO name will be shown when available.

FSS's provide information on airport conditions, radio aids and other facilities, and process flight plans. Airport Advisory Service (AAS) is provided on the CTAF by FSS's for select non-tower airports or airports where the tower is not in operation.

(See AIM, Para 4–1–9 Traffic Advisory Practices at Airports Without Operating Control Towers or AC 90–42C.)

Aviation weather briefing service is provided by FSS specialists. Flight and weather briefing services are also available by calling the telephone numbers listed.

Remote Communications Outlet (RCO)—An unmanned air/ground communications facility that is remotely controlled and provides UHF or VHF communications capability to extend the service range of an FSS.

Civil Communications Frequencies-Civil communications frequencies used in the FSS air/ground system are operated on 122.0, 122.2, 123.6; emergency 121.5; plus receive-only on 122.1.

a. 122.0 is assigned as the Enroute Flight Advisory Service frequency at selected FSS RADIO outlets.
b. 122.2 is assigned as a common enroute frequency.
c. 123.6 is assigned as the airport advisory frequency at select non-tower locations. At airports with a tower, FSS may provide airport advisories on the tower frequency when tower is closed.
d. 122.1 is the primary receive-only frequency at VOR's.
e. Some FSS's are assigned 50 kHz frequencies in the 122–126 MHz band (eg. 122.45). Pilots using the FSS A/G system should refer to this directory or appropriate charts to determine frequencies available at the FSS or remoted facility through which they wish to communicate.

Emergency frequency 121.5 and 243.0 are available at all Flight Service Stations, most Towers, Approach Control and RADAR facilities.

Frequencies published followed by the letter ''T'' or ''R'', indicate that the facility will only transmit or receive respectively on that frequency. All radio aids to navigation (NAVAID) frequencies are transmit only.

TERMINAL SERVICES

SFA—Single Frequency Approach.
CTAF—A program designed to get all vehicles and aircraft at airports without an operating control tower on a common frequency.
ATIS—A continuous broadcast of recorded non-control information in selected terminal areas.
D–ATIS—Digital ATIS provides ATIS information in text form outside the standard reception range of conventional ATIS via landline & data link communications and voice message within range of existing transmitters.
AUNICOM—Automated UNICOM is a computerized, command response system that provides automated weather, radio check capability and airport advisory information selected from an automated menu by microphone clicks.
UNICOM—A non-government air/ground radio communications facility which may provide airport information.
PTD—Pilot to Dispatcher.
APP CON—Approach Control. The symbol Ⓡ indicates radar approach control.
TOWER—Control tower.
GCA—Ground Control Approach System.
GND CON—Ground Control.
GCO—Ground Communication Outlet—An unstaffed, remotely controlled, ground/ground communications facility. Pilots at uncontrolled airports may contact ATC and FSS via VHF to a telephone connection to obtain an instrument clearance or close a VFR or IFR flight plan. They may also get an updated weather briefing prior to takeoff. Pilots will use four ''key clicks'' on the

VHF radio to contact the appropriate ATC facility or six ''key clicks'' to contact the FSS. The GCO system is intended to be used only on the ground.
DEP CON—Departure Control. The symbol Ⓡ indicates radar departure control.
CLNC DEL—Clearance Delivery.
PRE TAXI CLNC—Pre taxi clearance.

VFR ADVSY SVC—VFR Advisory Service. Service provided by Non-Radar Approach Control.
Advisory Service for VFR aircraft (upon a workload basis) ctc APP CON.
COMD POST—Command Post followed by the operator call sign in parenthesis.
PMSV—Pilot–to–Metro Service call sign, frequency and hours of operation, when full service is other than continuous. PMSV installations at which weather observation service is available shall be indicated, following the frequency and/or hours of operation as ''Wx obsn svc 1900–0000Z‡'' or ''other times'' may be used when no specific time is given. PMSV facilities manned by forecasters are considered ''Full Service''. PMSV facilities manned by weather observers are listed as ''Limited Service''.
OPS—Operations followed by the operator call sign in parenthesis.
CON
RANGE
FLT FLW—Flight Following
MEDIVAC
NOTE: Communication frequencies followed by the letter ''X'' indicate frequency available on request.

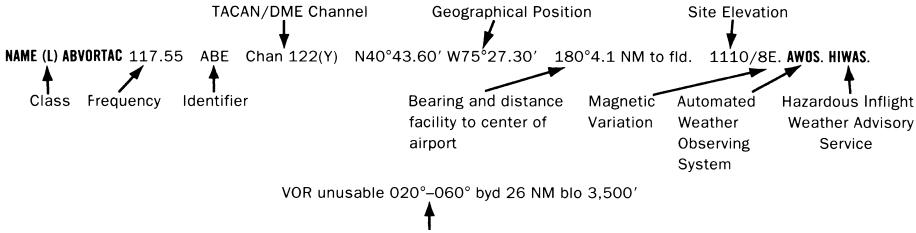
㉝ AIRSPACE

Information concerning Class B, C, and part–time D and E surface area airspace shall be published with effective times. Class D and E surface area airspace that is continuous as established by Rulemaking Docket will not be shown.
CLASS B—Radar Sequencing and Separation Service for all aircraft in CLASS B airspace.
CLASS C—Separation between IFR and VFR aircraft and sequencing of VFR arrivals to the primary airport.
TRSA—Radar Sequencing and Separation Service for participating VFR Aircraft within a Terminal Radar Service Area.
Class C, D, and E airspace described in this publication is that airspace usually consisting of a 5 NM radius core surface area that begins at the surface and extends upward to an altitude above the airport elevation (charted in MSL for Class C and Class D). Class E surface airspace normally extends from the surface up to but not including the overlying controlled airspace.
When part–time Class C or Class D airspace defaults to Class E, the core surface area becomes Class E. This will be formatted as:
AIRSPACE: CLASS C svc ''times'' ctc **APP CON** other times CLASS E:
or
AIRSPACE: CLASS D svc ''times'' other times CLASS E.
When a part–time Class C, Class D or Class E surface area defaults to Class G, the core surface area becomes Class G up to, but not including, the overlying controlled airspace. Normally, the overlying controlled airspace is Class E airspace beginning at either 700′ or 1200′ AGL. This will be formatted as:
AIRSPACE: CLASS C svc ''times'' ctc **APP CON** other times CLASS G, with CLASS E 700′ (or 1200′) AGL & abv:
or
AIRSPACE: CLASS D svc ''times'' other times CLASS G with CLASS E 700′ (or 1200′) AGL & abv:
or
AIRSPACE: CLASS E svc ''times'' other times CLASS G with CLASS E 700′ (or 1200′) AGL & abv.
NOTE: AIRSPACE SVC "TIMES" INCLUDE ALL ASSOCIATED ARRIVAL EXTENSIONS. Surface area arrival extensions for instrument approach procedures become part of the primary core surface area. These extensions may be either Class D or Class E airspace and are effective concurrent with the times of the primary core surface area. For example, when a part–time Class C, Class D or Class E surface area defaults to Class G, the associated arrival extensions will default to Class G at the same time. When a part–time Class C or Class D surface area defaults to Class E, the arrival extensions will remain in effect as Class E airspace.
NOTE: CLASS E AIRSPACE EXTENDING UPWARD FROM 700 FEET OR MORE ABOVE THE SURFACE, DESIGNATED IN CONJUNCTION WITH AN AIRPORT WITH AN APPROVED INSTRUMENT PROCEDURE.
Class E 700′ AGL (shown as magenta vignette on sectional charts) and 1200′ AGL (blue vignette) areas are designated when necessary to provide controlled airspace for transitioning to/from the terminal and enroute environments. Unless otherwise specified, these 700′/1200′ AGL Class E airspace areas remain in effect continuously, regardless of airport operating hours or surface area status. These transition areas should not be confused with surface areas or arrival extensions.
(See Chapter 3, AIRSPACE, in the Aeronautical Information Manual for further details)

㉞ RADIO AIDS TO NAVIGATION

The Airport/Facility Directory lists, by facility name, all Radio Aids to Navigation that appear on National Aeronautical Navigation Services Visual or IFR Aeronautical Charts and those upon which the FAA has approved an Instrument Approach Procedure, with exception of selected TACANs. Military TACAN information will be published for Military facilities contained in this publication. All VOR, VORTAC, TACAN, ILS and MLS equipment in the National Airspace System has an automatic monitoring and shutdown feature in the event of malfunction. Unmonitored, as used in this publication, for any navigational aid, means that monitoring personnel cannot observe the malfunction or shutdown signal. The NAVAID NOTAM file identifier will be shown as ''NOTAM FILE IAD'' and will be listed on the Radio Aids to Navigation line. When two or more NAVAIDS are listed and the NOTAM file identifier is different from that shown on the Radio Aids to Navigation line, it will be shown with the NAVAID listing. NOTAM file identifiers for ILSs and its components (e.g., NDB (LOM) are the same as the associated airports and are not repeated. Automated Surface Observing System (ASOS), Automated Weather Observing System (AWOS), and Hazardous Inflight Weather Advisory Service (HIWAS) will be shown when this service is broadcast over selected NAVAIDs.

NAVAID information is tabulated as indicated in the following sample:



Restriction within the normal altitude/range of the navigational aid (See primary alphabetical listing for restrictions on VORTAC and VOR/DME).

Note: Those DME channel numbers with a (Y) suffix require TACAN to be placed in the ''Y'' mode to receive distance information.

HIWAS—Hazardous Inflight Weather Advisory Service is a continuous broadcast of inflight weather advisories including summarized SIGMETs, convective SIGMETs, AIRMETs and urgent PIREPs. HIWAS is presently broadcast over selected VOR's throughout the U.S.

ASR/PAR—Indicates that Surveillance (ASR) or Precision (PAR) radar instrument approach minimums are published in the U.S. Terminal Procedures. Only part-time hours of operation will be shown.

RADIO CLASS DESIGNATIONS

VOR/DME/TACAN Standard Service Volume (SSV) Classifications

SSV Class	Altitudes	Distance (NM)
(T) Terminal	1000′ to 12,000′	25
(L) Low Altitude	1000′ to 18,000′	40
(H) High Altitude	1000′ to 14,500′	40
	14,500′ to 18,000′	100
	18,000′ to 45,000′	130
	45,000′ to 60,000′	100

NOTE: Additionally, (H) facilities provide (L) and (T) service volume and (L) facilities provide (T) service. Altitudes are with respect to the station's site elevation. Coverage is not available in a cone of airspace directly above the facility.

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The term VOR is, operationally, a general term covering the VHF omnidirectional bearing type of facility without regard to the fact that the power, the frequency protected service volume, the equipment configuration, and operational requirements may vary between facilities at different locations.

AB	Automatic Weather Broadcast.
DF	Direction Finding Service.
DME	UHF standard (TACAN compatible) distance measuring equipment.
DME(Y)	UHF standard (TACAN compatible) distance measuring equipment that require TACAN to be placed in the ''Y'' mode to receive DME.
GS	Glide slope.
H	Non-directional radio beacon (homing), power 50 watts to less than 2,000 watts (50 NM at all altitudes).
HH	Non-directional radio beacon (homing), power 2,000 watts or more (75 NM at all altitudes).
H-SAB	Non-directional radio beacons providing automatic transcribed weather service.
ILS	Instrument Landing System (voice, where available, on localizer channel).
IM	Inner marker.
ISMLS	Interim Standard Microwave Landing System.
LDA	Localizer Directional Aid.
LMM	Compass locator station when installed at middle marker site (15 NM at all altitudes).
LOM	Compass locator station when installed at outer marker site (15 NM at all altitudes).
MH	Non-directional radio beacon (homing) power less than 50 watts (25 NM at all altitudes).
MLS	Microwave Landing System.
MM	Middle marker.
OM	Outer marker.
S	Simultaneous range homing signal and/or voice.
SABH	Non-directional radio beacon not authorized for IFR or ATC. Provides automatic weather broadcasts.
SDF	Simplified Direction Facility.
TACAN	UHF navigational facility-omnidirectional course and distance information.
VOR	VHF navigational facility-omnidirectional course only.
VOR/DME	Collocated VOR navigational facility and UHF standard distance measuring equipment.
VORTAC	Collocated VOR and TACAN navigational facilities.
W	Without voice on radio facility frequency.
Z	VHF station location marker at a LF radio facility.

ILS FACILITY PEFORMANCE CLASSIFICATION CODES

Codes define the ability of an ILS to support autoland operations. The two portions of the code represent Official Category and farthest point along a Category I, II, or III approach that the Localizer meets Category III structure tolerances.

Official Category: I, II, or III; the lowest minima on published or unpublished procedures supported by the ILS.

Farthest point of satisfactory Category III Localizer performance for Category I, II, or III approaches: A – 4 NM prior to runway threshold, B – 3500 ft prior to runway threshold, C – glide angle dependent but generally 750–1000 ft prior to threshold, T – runway threshold, D – 3000 ft after runway threshold, and E – 2000 ft prior to stop end of runway.

ILS information is tabulated as indicated in the following sample:

ILS/DME 108.5 I–ORL Chan 22 Rwy 18. Class IIE. LOM HERNY NDB.

ILS Facility Performance Classification Code

FREQUENCY PAIRING PLAN AND MLS CHANNELING

MLS CHANNEL	VHF FREQUENCY	TACAN CHANNEL	MLS CHANNEL	VHF FREQUENCY	TACAN CHANNEL	MLS CHANNEL	VHF FREQUENCY	TACAN CHANNEL
500	108.10	18X	568	109.45	31Y	636	114.15	88Y
502	108.30	20X	570	109.55	32Y	638	114.25	89Y
504	108.50	22X	572	109.65	33Y	640	114.35	90Y
506	108.70	24X	574	109.75	34Y	642	114.45	91Y
508	108.90	26X	576	109.85	35Y	644	114.55	92Y
510	109.10	28X	578	109.95	36Y	646	114.65	93Y
512	109.30	30X	580	110.05	37Y	648	114.75	94Y
514	109.50	32X	582	110.15	38Y	650	114.85	95Y
516	109.70	34X	584	110.25	39Y	652	114.95	96Y
518	109.90	36X	586	110.35	40Y	654	115.05	97Y
520	110.10	38X	588	110.45	41Y	656	115.15	98Y
522	110.30	40X	590	110.55	42Y	658	115.25	99Y
524	110.50	42X	592	110.65	43Y	660	115.35	100Y
526	110.70	44X	594	110.75	44Y	662	115.45	101Y
528	110.90	46X	596	110.85	45Y	664	115.55	102Y
530	111.10	48X	598	110.95	46Y	666	115.65	103Y
532	111.30	50X	600	111.05	47Y	668	115.75	104Y
534	111.50	52X	602	111.15	48Y	670	115.85	105Y
536	111.70	54X	604	111.25	49Y	672	115.95	106Y
538	111.90	56X	606	111.35	50Y	674	116.05	107Y
540	108.05	17Y	608	111.45	51Y	676	116.15	108Y
542	108.15	18Y	610	111.55	52Y	678	116.25	109Y
544	108.25	19Y	612	111.65	53Y	680	116.35	110Y
546	108.35	20Y	614	111.75	54Y	682	116.45	111Y
548	108.45	21Y	616	111.85	55Y	684	116.55	112Y
550	108.55	22Y	618	111.95	56Y	686	116.65	113Y
552	108.65	23Y	620	113.35	80Y	688	116.75	114Y
554	108.75	24Y	622	113.45	81Y	690	116.85	115Y
556	108.85	25Y	624	113.55	82Y	692	116.95	116Y
558	108.95	26Y	626	113.65	83Y	694	117.05	117Y
560	109.05	27Y	628	113.75	84Y	696	117.15	118Y
562	109.15	28Y	630	113.85	85Y	698	117.25	119Y
564	109.25	29Y	632	113.95	86Y			
566	109.35	30Y	634	114.05	87Y			

FREQUENCY PAIRING PLAN AND MLS CHANNELING

The following is a list of paired VOR/ILS VHF frequencies with TACAN channels and MLS channels.

TACAN CHANNEL	VHF FREQUENCY	MLS CHANNEL	TACAN CHANNEL	VHF FREQUENCY	MLS CHANNEL	TACAN CHANNEL	VHF FREQUENCY	MLS CHANNEL
2X	134.5	-	19Y	108.25	544	25X	108.80	-
2Y	134.55	-	20X	108.30	502	25Y	108.85	556
11X	135.4	-	20Y	108.35	546	26X	108.90	508
11Y	135.45	-	21X	108.40	-	26Y	108.95	558
12X	135.5	-	21Y	108.45	548	27X	109.00	-
12Y	135.55	-	22X	108.50	504	27Y	109.05	560
17X	108.00	-	22Y	108.55	550	28X	109.10	510
17Y	108.05	540	23X	108.60	-	28Y	109.15	562
18X	108.10	500	23Y	108.65	552	29X	109.20	-
18Y	108.15	542	24X	108.70	506	29Y	109.25	564
19X	108.20	-	24Y	108.75	554	30X	109.30	512

TACAN CHANNEL	VHF FREQUENCY	MLS CHANNEL	TACAN CHANNEL	VHF FREQUENCY	MLS CHANNEL	TACAN CHANNEL	VHF FREQUENCY	MLS CHANNEL
30Y	109.35	566	63X	133.60	-	95Y	114.85	650
31X	109.40	-	63Y	133.65	-	96X	114.90	-
31Y	109.45	568	64X	133.70	-	96Y	114.95	652
32X	109.50	514	64Y	133.75	-	97X	115.00	-
32Y	109.55	570	65X	133.80	-	97Y	115.05	654
33X	109.60	-	65Y	133.85	-	98X	115.10	-
33Y	109.65	572	66X	133.90	-	98Y	115.15	656
34X	109.70	516	66Y	133.95	-	99X	115.20	-
34Y	109.75	574	67X	134.00	-	99Y	115.25	658
35X	109.80	-	67Y	134.05	-	100X	115.30	-
35Y	109.85	576	68X	134.10	-	100Y	115.35	660
36X	109.90	518	68Y	134.15	-	101X	115.40	-
36Y	109.95	578	69X	134.20	-	101Y	115.45	662
37X	110.00	-	69Y	134.25	-	102X	115.50	-
37Y	110.05	580	70X	112.30	-	102Y	115.55	664
38X	110.10	520	70Y	112.35	-	103X	115.60	-
38Y	110.15	582	71X	112.40	-	103Y	115.65	666
39X	110.20	-	71Y	112.45	-	104X	115.70	-
39Y	110.25	584	72X	112.50	-	104Y	115.75	668
40X	110.30	522	72Y	112.55	-	105X	115.80	-
40Y	110.35	586	73X	112.60	-	105Y	115.85	670
41X	110.40	-	73Y	112.65	-	106X	115.90	-
41Y	110.45	588	74X	112.70	-	106Y	115.95	672
42X	110.50	524	74Y	112.75	-	107X	116.00	-
42Y	110.55	590	75X	112.80	-	107Y	116.05	674
43X	110.60	-	75Y	112.85	-	108X	116.10	-
43Y	110.65	592	76X	112.90	-	108Y	116.15	676
44X	110.70	526	76Y	112.95	-	109X	116.20	-
44Y	110.75	594	77X	113.00	-	109Y	116.25	678
45X	110.80	-	77Y	113.05	-	110X	116.30	-
45Y	110.85	596	78X	113.10	-	110Y	116.35	680
46X	110.90	528	78Y	113.15	-	111X	116.40	-
46Y	110.95	598	79X	113.20	-	111Y	116.45	682
47X	111.00	-	79Y	113.25	-	112X	116.50	-
47Y	111.05	600	80X	113.30	-	112Y	116.55	684
48X	111.10	530	80Y	113.35	620	113X	116.60	-
48Y	111.15	602	81X	113.40	-	113Y	116.65	686
49X	111.20	-	81Y	113.45	622	114X	116.70	-
49Y	111.25	604	82X	113.50	-	114Y	116.75	688
50X	111.30	532	82Y	113.55	624	115X	116.80	-
50Y	111.35	606	83X	113.60	-	115Y	116.85	690
51X	111.40	-	83Y	113.65	626	116X	116.90	-
51Y	111.45	608	84X	113.70	-	116Y	116.95	692
52X	111.50	534	84Y	113.75	628	117X	117.00	-
52Y	111.55	610	85X	113.80	-	117Y	117.05	694
53X	111.60	-	85Y	113.85	630	118X	117.10	-
53Y	111.65	612	86X	113.90	-	118Y	117.15	696
54X	111.70	536	86Y	113.95	632	119X	117.20	-
54Y	111.75	614	87X	114.00	-	119Y	117.25	698
55X	111.80	-	87Y	114.05	634	120X	117.30	-
55Y	111.85	616	88X	114.10	-	120Y	117.35	-
56X	111.90	538	88Y	114.15	636	121X	117.40	-
56Y	111.95	618	89X	114.20	-	121Y	117.45	-
57X	112.00	-	89Y	114.25	638	122X	117.50	-
57Y	112.05	-	90X	114.30	-	122Y	117.55	-
58X	112.10	-	90Y	114.35	640	123X	117.60	-
58Y	112.15	-	91X	114.40	-	123Y	117.65	-
59X	112.20	-	91Y	114.45	642	124X	117.70	-
59Y	112.25	-	92X	114.50	-	124Y	117.75	-
60X	133.30	-	92Y	114.55	644	125X	117.80	-
60Y	133.35	-	93X	114.60	-	125Y	117.85	-
61X	133.40	-	93Y	114.65	646	126X	117.90	-
61Y	133.45	-	94X	114.70	-	126Y	117.95	-
62X	133.50	-	94Y	114.75	648			
62Y	133.55	-	95X	114.80	-			

(35) COMM/NAV/WEATHER REMARKS:

These remarks consist of pertinent information affecting the current status of communications, NAVAIDs and weather.

CHANDELLE ESTATES (See DOVER)

CHORMAN (See FARMINGTON)

DELAWARE AIRPARK (See DOVER/CHESWOLD)

DELDOT HELISTOP (See DOVER)

DOVER

CHANDELLE ESTATES (ØN4) 3 NE UTC−5(−4DT) N39°12.14′ W75°29.13′ **WASHINGTON**

22 B S4 **FUEL** 100LL, MOGAS NOTAM FILE MIV

RWY 04–22: H2533X28 (ASPH) LIRL

RWY 04: Thld dsplcd 539′. Trees. **RWY 22:** Thld dsplcd 538′. Trees.

AIRPORT REMARKS: Attended continuously. ACTIVATE LIRL Rwy 04–22 and rotating beacon—122.7. Heavy bird activity on and in vicinity of arpt Oct–Feb. Rwy 04 and 22 dsplcd thld marked with white line; dashed white lines leading to displacement have faded. Rwy 22 displacement marked with white lines, dashed white lines leading to dsplcd thld have faded. Rwy 04–22 has vertical; horizontal; and alligator cracking.

COMMUNICATIONS: CTAF/UNICOM 122.8

DELDOT HELISTOP (ØN5) 0 N UTC−5(−4DT) N39°08.97′ W75°30.30′ **WASHINGTON**

30 NOTAM FILE MIV

HELIPAD H1: 60X60 (ASPH) PERIMETER LIGHTS

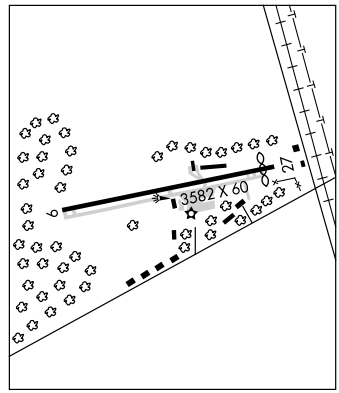
HELIPORT REMARKS: Attended Mon–Fri 1300–2130Z‡. Located ESE Dover. ACTIVATE perimeter lgts—CTAF. Unmarked/unlgtd 40′ P-lines 0.1 mile E. Ingress and egress is NW and SE; Touchdown zone area 60′X60′.

COMMUNICATIONS: CTAF 123.0

DOVER AFB (DOV)(KDOV) AF 3 E UTC−5(−4DT) N39°07.77′ W75°27.96′ **WASHINGTON**
28 B TPA–See Remarks AOE Class IV, ARFF Index A NOTAM FILE DOV Not insp. **H–10I, 12I, L–34F, A**
RWY 14–32: H12903X150 (PEM) PCN 82 R/B/W/T HIRL **DIAP, AD**
RWY 14: PAPI(P2L). Thld dsplcd 4250′. **RWY 32:** REIL. PAPI(P4L).
RWY 01–19: H9602X200 (PEM) PCN 52 R/B/W/T HIRL CL
RWY 01: ALSF2. TDZL. PAPI(P4L). **RWY 19:** ALSF1. PAPI(P4L).
MILITARY SERVICE: LGT Rwy 01 and Rwy 19 PAPI and ILS glide paths not coincident except for height group 4 acft (A300, B1, B747/767/777, C5, DC10, E4, KC10, VC25). PAPI provides proper TCH for height group 4 acft only. Rwy 04 PAPI on left side. **JASU** 3(MA–1A) (M32A–86) (adapters not avbl.) **FUEL** A+
FLUID SP PRESAIR LPOX LOX **OIL** O–133–148 SOAP **TRAN ALERT** Opr 24 hours.
MILITARY REMARKS: See FLIP AP/1 Supplementary Arpt Information. **RSTD** Non–DOD civil acft ops 72 hrs PPR by contacting (302) 736–6614. PPR except AMC, Special Air Mission, DoD courier svc, and evacuation mission DSN 445–2861. All acft with hazardous material/rqr remote/isolated parking will ctc 436 airborne pulse search radar Explosive Handling Section DSN 445–2304 1230–2130Z‡ or ATOC Duty Officer DSN 445–2300 2130–1230Z‡ for PPR. Base OPS DSN 445–2861/4192, C302–677–2861/4192. All inbound passenger/cargo acft must ctc Comd Post no later than 30 min prior to ldg. Rwy 32 tkf distance avbl 10,070′. AMC acft opr restricted during Bird Watch condition Moderate (tkf or ldg permission only when dep/arr route avoid identified bird activity, no local IFR/VFR tfc pattern activity) and Severe (tkf and ldg prohibited without OG/CC approval), ctc Base OPS for current Bird Watch condition. No practice apch between 0300–1200Z‡ (0400–1200Z‡ during Bird Aircraft Strike Hazard Phase II). ATC will approve 1 apch to full stop ldg only. Acft taxiing out of main ramp using taxi lane between Delta row and spot Echo must use minimum power and in–board engine only (C5 acft should not exceed 40 percent N1 RPM) when turning onto Twy A. **CAUTION** Possible jet wake turbulence in tfc pattern and C5 jet blast during gnd opr. High speed, low alt heavy jet traffic within 10 NM. Five civilian arpt located within 10 NM radius. Special hazard exist for wide body acft taxiing from ramp. Follow me truck rqr for all movements on ramp by non C5 tran acft, tran C5 follow me svc avbl on request. Tree line east of Rwy 19 apch end may cause wind shear during ldg when wind is from southeast. Bird hazard Oct–Apr. Breaking action less than optimum when rwy is wet due to rubber build–up. **TFC PAT** TPA–Rectangular 1804(1776), overhead 2504(2476). Aero Club/lgt acft 1004(976). **NS ABTMT** Strict compliance with procedure rqr. **MISC** First 1000′ Rwy 01–19 concrete, middle 7600′ asphalt. Twy D edge lgts 40′ from twy edge between Rwy 32 hold line and Rwy 01–19. Rwy 32 first 2000′, 1000′ southeast of Twy C and last 1000′ concrete, remainder of rwy asphalt. Rwy 14–32 grooved full length exc at the intersection of Rwy 01–19. First 4250′ Rwy 14 and first 1650′ Rwy 32 grooved concrete, middle 7000′ asphalt. Afld management has no COMSEC avbl for tran aircrews. Tran aircrews should plan to arr with appropriate amount of COMSEC to complete entire mission. Afld management has limited COMSEC storage for tran aircrews.
WEATHER DATA SOURCES: ASOS DSN 445–2698 C302–677–2698.
COMMUNICATIONS: **D–ATIS** 135.05 273.5 DSN 445–2847. 269.125 (134.1 thru Comd Post) **PTD** 134.1
SMYRNA RCO 122.1R 111.4T (MILLVILLE RADIO)
Ⓡ **APP CON** 132.425 135.15X 142.2X 257.875 (VFR sequencing svc 25 NM out on 125.9 282.325)
TOWER 126.35 279.625 **GND CON** 118.875 225.4 **CLNC DEL** 125.55 289.4
Ⓡ **DEP CON** 134.425 257.875 323.0
COMD POST 134.1 349.4 **PMSV METRO** Full wx svc avbl Mon–Fri 0900–0100Z‡, clsd weekends and holidays. Combat wx flight DSN 445–4175/76, comm. (302) 677–4175/76. Wx briefings for tran aircrew are avbl via the 15 operational squadron (OWS) at Scott AFB, DSN 576–9755/9702, comm. (618) 256–9755/9702. Jet side svc 1 stop–shop prints IFM crew packages. Building obstruction may impact prevailing visibility 150°–260°. During evac of combat wx flight contact 15 OWS at number above. Alternate wx location visibility severely limited due to building and parked aircraft. ATC will supplement observation as needed.
RADIO AIDS TO NAVIGATION: NOTAM FILE DOV.
SMYRNA (L) VORTAC 111.4 ENO Chan 51 N39°13.90′ W75°30.96′ 168° 6.6 NM to fld. 10/9W.
(T) TACAN Chan 37 DOV (110.0) N39°07.94′ W75°28.04′ at fld. 17/9W. No NOTAM MP Wed 1100–1400Z‡ (2000/2+1).
ILS 109.95 I–DOV Rwy 01. No NOTAM MP Mon, Tue, Thu, Fri 1100–1430Z‡ (2000/2+1).
ILS 111.9 I–LIR Rwy 19. Back course unusable. No NOTAM MP Mon, Tue, Thu, Fri 0800–1100Z‡ (3000/5+1) ILS Wheel crossing height data: Group 4(18.1′).
COMM/NAV/WEATHER REMARKS: Radar No NOTAM MP Mon, Tue, Thu, Fri 0800–1100Z‡ (3000/5+1).

DOVER/CHESWOLD

DELAWARE AIRPARK (33N) 1 W UTC−5(−4DT) N39°13.10′ W75°35.80′ **WASHINGTON**
56 B **FUEL** 100LL TPA—912(856) NOTAM FILE MIV **L–34F, A**
RWY 09–27: H3582X60 (ASPH) S–13, D–18 MIRL 0.3% up W **IAP**
RWY 27: Thld dsplcd 350′. Antenna.
RUNWAY DECLARED DISTANCE INFORMATION
RWY 09: TORA–3582 TODA–3582 ASDA–3232 LDA–3232
RWY 27: TORA–3582 TODA–3582 ASDA–3582 LDA–3232
AIRPORT REMARKS: Attended 1300–2100Z‡. 24 hr self-service credit card fuel avbl. Uncontrolled vehicular tfc crosses center fld. Deer on and invof arpt. Mowing ops conducted Apr–Oct 1100–1800Z‡. If your acft cannot opr at this arpt due to size or lack of facilities, an alternative is the Dover Civil Air Terminal located at Dover AFB. To use, 72 hr PPR call 302–735–5519. ACTIVATE MIRL Rwy 09–27—CTAF.
COMMUNICATIONS: CTAF/UNICOM 123.0
SMYRNA RCO 122.1R 111.4T (MILLVILLE RADIO)
Ⓡ **DOVER APP/DEP CON** 132.425 **CLINC DEL** 125.55
RADIO AIDS TO NAVIGATION: NOTAM FILE MIV.
SMYRNA (L) VORTAC 111.4 ENO Chan 51 N39°13.90′ W75°30.96′ 267° 3.8 NM to fld. 10/09W.



DUPONT N39°40.69′ W75°36.42′ NOTAM FILE ILG. **WASHINGTON**
(L) VORTAC 114.0 DQO Chan 87 at New Castle. 70/10W. **H–10I, L–34G, A**
VOR portion unusable:
025°–039° byd 5 NM blo 10,000′
025°–039° byd 25 NM
040°–120° byd 25 NM blo 4000′
125°–225° byd 30 NM blo 3000′
225°–230° byd 15 NM blo 3000′
230°–265° byd 22 NM
265°–275° byd 30 NM blo 8000′
300°–315° byd 35 NM blo 3000′
355°–005° blo 3000′
355°–005° byd 15 NM blo 4000′
355°–005° byd 25 NM

DME portion unusable:
040°–100° byd 25 NM blo 5000′
210°–235° byd 30 NM blo 3000′
235°–265° byd 22 NM
265°–275° byd 30 NM blo 5000′
310°–320° byd 35 NM blo 4000′
RCO 122.1R 114.0T (MILLVILLE RADIO)

FARMINGTON

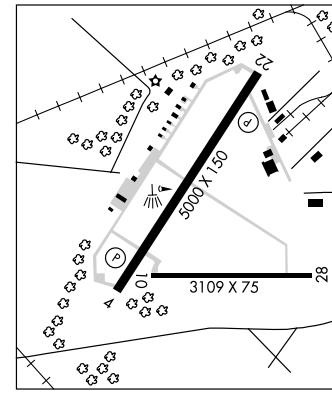
CHORMAN (D74) 2 SW UTC−5(−4DT) N38°50.97′ W75°36.77′ **WASHINGTON**
66 B S4 NOTAM FILE MIV **L–34F, 36J, A**
RWY 16–34: H3588X37 (ASPH) LIRL
RWY 16: REIL. TRCV (TRIL). Trees. **RWY 34:** REIL. TRCV (TRIL). Sign.
AIRPORT REMARKS: Attended Mon–Fri 1330Z‡–dusk. Agriculture spraying activity on and invof arpt. Rwy 16–34 large unsealed surface cracks, alligator patches. Loading pad adjacent to east side Rwy 34. For rotating bcn call 302–349–5055 or 645–9225. For LIRL Rwy 16–34 and REIL Rwy 16 and Rwy 34 call 302–349–5055 or 645–9225.
COMMUNICATIONS: CTAF 122.9
RADIO AIDS TO NAVIGATION: NOTAM FILE MIV.
WATERLOO (L) VOR/DME 112.6 ATR Chan 73 N38°48.59′ W75°12.68′ 286° 19 NM to fld. 5/09W.

FELTON

HENDERSON AVIATION (ØN6) 2 NE UTC−5(−4DT) N39°00.77′ W75°32.04′ **WASHINGTON**
50 S4 NOTAM FILE MIV
RWY 15–33: 2048X40 (TURF)
RWY 15: Building. **RWY 33:** Trees.
AIRPORT REMARKS: Attended Mon–Fri 1300–2200Z‡.
COMMUNICATIONS: CTAF/UNICOM 123.0

GEORGETOWN

SUSSEX CO (GED) 2 SE UTC−5(−4DT) N38°41.27′ W75°21.50′ — WASHINGTON
53 B S4 **FUEL** 100LL, JET A NOTAM FILE GED — H–10I, 12I, L–34F, 36J, A
RWY 04–22: H5000X150 (ASPH-GRVD) MIRL — IAP
RWY 04: REIL. PAPI(P4L)—GA 3.0° TCH 30′. Trees.
RWY 22: REIL. PAPI(P4L)—GA 3.0° TCH 30′. Trees.
RWY 10–28: H3109X75 (ASPH) MIRL
RWY 10: REIL. **RWY 28:** REIL.
AIRPORT REMARKS: Attended 1200–0200Z‡. Parachute Jumping. PAEW within safety area of all rwys and twys. ACTIVATE MIRL Rwys 04–22 and 10–28 and REIL Rwy 04, Rwy 22, Rwy 10 and Rwy 28—CTAF.
WEATHER DATA SOURCES: ASOS 118.375 (302) 856–2927.
COMMUNICATIONS: CTAF/UNICOM 123.0
WATERLOO RCO 122.1R 112.6T (MILLVILLE RADIO)
Ⓡ **DOVER APP/DEP CON** 132.425
GCO 125.55 (DOVER CLNC), OTS indef.
RADIO AIDS TO NAVIGATION: NOTAM FILE MIV.
WATERLOO (L) VOR/DME 112.6 ATR Chan 73 N38°48.59′ W75°12.68′ 232° 10.1 NM to fld. 5/09W.

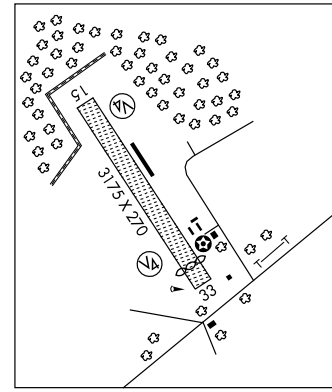


HADIN N39°34.87′ W75°36.83′ NOTAM FILE ILG. — WASHINGTON
NDB (LOM) 248 IL 013° 5.9 NM to New Castle. — L–34G

HENDERSON AVIATION (See FELTON)

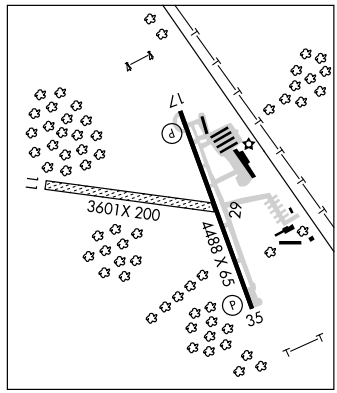
JENKINS (See WYOMING)

LAUREL (NØ6) 1 SW UTC−5(−4DT) N38°32.53′ W75°35.66′ — WASHINGTON
30 B S4 NOTAM FILE MIV — L–34F, 36J, A
RWY 15–33: 3175X270 (TURF) LIRL — IAP
RWY 15: REIL. TRCV (TRIL) Trees.
RWY 33: TRCV (TRIL) Thld dsplcd 270′. Road.
AIRPORT REMARKS: Attended 1300Z‡–dusk. Parachute Jumping. Significant sky–diving operation seasonal to all but winter months. Rwy 33 dsplcd thld marked with 3 large orange cones each side. Rwy 15 TRCV calibration unconfirmed. Rwy 33 TRCV calibration unconfirmed. ACTIVATE LIRL Rwy 15–33 and REIL Rwy 33 and rotating bcn—CTAF.
COMMUNICATIONS: CTAF/UNICOM 122.8
PATUXENT APP/DEP CON 127.95 (Mon–Fri 1200–0400Z‡, Sat–Sun 1300–2300Z‡, clsd holidays)
Ⓡ **WASHINGTON CENTER APP/DEP CON** 132.05 (Mon–Fri 0400–1200Z‡, Sat–Sun 2300–1300Z‡)
RADIO AIDS TO NAVIGATION: NOTAM FILE SBY.
SALISBURY (L) VORTAC 111.2 SBY Chan 49 N38°20.70′ W75°30.64′ 354° 12.5 NM to fld. 50/12W.



MIDDLETOWN

SUMMIT (EVY) 5 N UTC−5(−4DT) N39°31.26′ W75°43.42′ **WASHINGTON**
70 B S4 **FUEL** 100LL, JET A OX 2 NOTAM FILE MIV **L–34G, A**
RWY 17–35: H4488X65 (ASPH) MIRL **IAP**
RWY 17: REIL. PAPI(P4R). **RWY 35:** REIL. PAPI(P4L).
RWY 11–29: 3601X200 (TURF) LIRL
RWY 11: REIL. **RWY 29:** REIL.
AIRPORT REMARKS: Attended 1200–0000Z‡. Extensive medium/heavy helicopter training in progress all hrs on and invof arpt; high rotor downwash velocities. When CH47 helicopters opr, req advisories on UNICOM. S end of parking ramp and mid–field twy clsd. ACTIVATE LIRL and REIL Rwy 11–29—123.5.
WEATHER DATA SOURCES: AWOS–3 132.325 (302) 378–2063.
COMMUNICATIONS: CTAF/UNICOM 122.725
Ⓡ **PHILADELPHIA APP/DEP CON** 118.35 **CLNC DEL** 125.3 TF 800–354–9884
RADIO AIDS TO NAVIGATION: NOTAM FILE ILG.
DUPONT (L) VORTAC 114.0 DQO Chan 87 N39°40.69′ W75°36.42′ 220° 10.9 NM to fld. 70/10W.
HADIN NDB (LOM) 248 IL N39°34.87′ W75°36.83′ 245° 6.2 NM to fld.



NEW CASTLE (See WILMINGTON)

SMYRNA N39°13.90′ W75°30.96′ NOTAM FILE MIV. **WASHINGTON**
(L) VORTAC 111.4 ENO Chan 51 267° 3.8 NM to Delaware Airpark. 10/09W. **H–10I, L–34F, A**
TACAN azimuth and DME unusable:
140°–150° byd 36 NM blo 3000′ 200°–300° byd 36 NM blo 3000′
RCO 122.1R 111.4T (MILLVILLE RADIO)

SMYRNA (38N) 1 E UTC−5(−4DT) N39°18.22′ W75°35.03′ **WASHINGTON**
18 B **FUEL** 100LL, MOGAS TPA—818(800) NOTAM FILE MIV
RWY 10–28: 2600X125 (TURF) LIRL
RWY 10: REIL. TRCV(TRIL). Trees. **RWY 28:** REIL. TRCV(TRIL). Trees.
AIRPORT REMARKS: Attended irregularly. Arpt lgts opr dusk–0500Z‡. ACTIVATE LIRL Rwy 10–28—CTAF. Migratory water fowl on and in vicinity of arpt Oct–Feb. Rwy 10–28 rolling surface.
COMMUNICATIONS: CTAF/UNICOM 122.8

SUMMIT (See MIDDLETOWN)

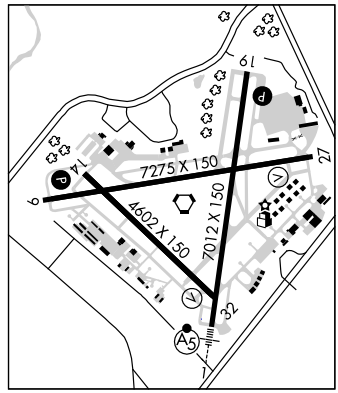
SUSSEX CO (See GEORGETOWN)

WATERLOO N38°48.59′ W75°12.68′ NOTAM FILE MIV. **WASHINGTON**
(L) VOR/DME 112.6 ATR Chan 73 233° 10.0 NM to Sussex Co. 5/09W. **H–10I, L–34F, 36J, A**
DME portion unusable 179°–293° beyond 30 NM below 2000′, 294°–330° inside 10 NM.
RCO 122.1R 112.6T (MILLVILLE RADIO)

WILMINGTON

NEW CASTLE (ILG) 4 S UTC−5(−4DT) N39°40.72′ W75°36.40′ **WASHINGTON**
80 B S4 **FUEL** 100LL, JET A, OX 1, 2, 3, 4 LRA Class I, ARFF Index B **H–10I, 12I, L–34G, A**
NOTAM FILE ILG **IAP, AD**

RWY 09–27: H7275X150 (ASPH–GRVD) S–90, D–140, ST–175, DT–250 HIRL
RWY 09: PAPI(P4L)—GA 3.0° TCH 55′. Trees.
RWY 27: VASI(V4L)—GA 3.0°TCH 51′. Trees.
RWY 01–19: H7012X150 (ASPH–GRVD) S–90, D–140, ST–175, DT–250 HIRL
RWY 01: MALSR. Road.
RWY 19: REIL. PAPI(P4L)—GA 3.0°TCH 55′. Trees.
RWY 14–32: H4602X150 (ASPH) S–50, D–60 MIRL
RWY 14: Trees. **RWY 32:** VASI(V4L)—GA 3.0°TCH 27′.



LAND AND HOLD SHORT OPERATIONS

LANDING	HOLD SHORT POINT	DIST AVBL
RWY 01	09–27	4050
RWY 14	01–19	4450
RWY 19	14–32	5750
RWY 32	09–27	3600

RUNWAY DECLARED DISTANCE INFORMATION

RWY 01:	TORA–7012	TODA–7012	ASDA–7012	LDA–7012
RWY 09:	TORA–7000	TODA–7275	ASDA–7000	LDA–7000
RWY 14:	TORA–4603	TODA–4603	ASDA–4603	LDA–4603
RWY 19:	TORA–7012	TODA–7012	ASDA–7012	LDA–7012
RWY 27:	TORA–7000	TODA–7275	ASDA–7000	LDA–7000
RWY 32:	TORA–4603	TODA–4603	ASDA–4603	LDA–4603

AIRPORT REMARKS: Attended continuously. Birds on and invof arpt. Rwy 09–27 no touch and go ldg for turbo jet 0400–1200Z‡. When twr clsd, pilots must announce intentions over CTAF before ldgs; tkf or ground travel on rwys and twys. When twr clsd announce emergencies on CTAF directly to ARFF station. Rwy 14–32 NSTD military assault landing zone (ALZ) lighting. Rwy 14–32 CLOSED to air carrier aircraft ops. Ctc FBO's for overngt parking; extended svcs. When terminal building clsd 0400–1100Z‡ contact arpt ops department on 126.0 or 302–229–6315 (24 hr cell). Private gnd vehicles cross Twy A between Twy A4 and Twy C. Twy G section between Twy H and Twy J limited to acft with wingspan of 79 ft or less. Twy G section between Twy H and Twy D limited to acft with wingspan of 49 ft or less. When twr clsd ACTIVATE HIRL Rwy 01–19, Rwy 09–27, MIRL Rwy 14–32, PAPI Rwy 09, Rwy 19, Rwy 27 and twy lgts—CTAF. Ldg fee for all acft over 7,500 pounds except federal government and military.
WEATHER DATA SOURCES: ASOS (302) 328–1536.
COMMUNICATIONS: CTAF 126.0 **ATIS** 123.95 **UNICOM** 122.95
DUPONT RCO 122.1R 114.0T (MILLVILLE RADIO)
Ⓡ **PHILADELPHIA APP/DEP CON** 118.35 **CLNC DEL** 119.95 TF 800–354–9884
WILMINGTON TOWER 126.0 (1130–0400Z‡) **GND CON** 121.7
AIRSPACE: CLASS D svc 1130–0400Z‡ other times CLASS E.
RADIO AIDS TO NAVIGATION: NOTAM FILE ILG.
DUPONT (L) VORTAC 114.0 DQO Chan 87 N39°40.69′ W75°36.42′ at fld. 70/10W.
HADIN NDB (LOM) 248 IL N39°34.87′ W75°36.83′ 013° 5.9 NM to fld.
ILS 110.3 I–ILG Rwy 01. Class IA. LOM HADIN NDB. ILS unmonitored when twr clsd.

WYOMING

JENKINS (15N) 1 W UTC−5(−4DT) N39°07.17′ W75°35.03′ **WASHINGTON**
53 B S4 NOTAM FILE MIV
RWY 18–36: 2842X70 (TURF) LIRL
RWY 18: TRCV (TRIL). Trees. **RWY 36:** TRCV (TRIL). Thld dsplcd 225′. Road.
RWY 12–30: 2035X70 (TURF)
RWY 30: Road.
AIRPORT REMARKS: Attended continuously. Rwy 18 TRCV calibration unconfirmed. Rwy 36 TRCV calibration unconfirmed. ACTIVATE LIRL Rwy18–36 and rotating bcn—122.7.
COMMUNICATIONS: CTAF/UNICOM 122.8

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2010 U.S. & CANADIAN MILITARY AERIAL AIRCRAFT/PARACHUTE DEMONSTRATIONS

During CY 2010, the U.S. and Canadian Military Aerial Demonstration Teams (Thunderbirds, Blue Angels, Snowbirds, and Golden Knights) will be performing on the dates and locations listed below.

Pilots should expect Temporary Flight Restrictions (TFR) in accordance with 14 CFR Section 91.145, Management of aircraft operations in the vicinity of aerial demonstrations and major sporting events. The dimensions and effective times of the TFRs may vary based upon the specific aerial demonstration event and will be issued via the U.S. NOTAM system. Pilots are strongly encouraged to check FDC NOTAMs to verify they have the most current information regarding these airspace restrictions.

The currently scheduled 2010 aerial demonstration locations, subject to change without notice, are:

DATE:		USAF Thunderbirds	USN Blue Angels	USA Golden Knights	Canadian Snowbirds
June	5-6	Ocean City, MD	Eau Claire, WI	Eau Claire, WI	
	5-6			Florence, SC	
	12-13		Milwaukee, WI	Milwaukee, WI	
	19-20	Tinker AFB, OK	Cape Girardeau, MO		
	19-21			Cape Girardeau, MO	
	23			Ft McNair, VA	
	26-27	North Kingstown, RI	St. Cloud, MN		
	26-27			Fairmont, NC	
July	3			Madison, WI	
	3			Dubuque, IA	
	3-4		Traverse City, MI		
	10		Pensacola Beach, FL		
	10-11	Gary, IN		Gary, IN	
	17-18	Duluth, MN	Dayton, OH		
	24-25	Fairchild AFB, WA	Idaho Falls, ID		
	28	Cheyenne, WY			
	29			Goshen, IN	
	29			Ft AP Hill, VA	
	31	Rockford, IL	Anchorage, AK	Rockford, IL	Elmendorf AFB, AK
August	1	Rockford, IL	Anchorage, AK	Rockford, IL	Elmendorf AFB, AK
	7-8	Point Mugu NAS, CA	Seattle, WA	New Castle, PA	
	14-15		Chicago, IL	Chicago, IL	
	21-22	Westfield, MA		Westfield, MA	
	25			Atlantic City, NJ	
	26			Ft Monroe, VA	
	28-29	Coney Island (Brooklyn), NY	Portsmouth, NH	Coney Island (Brooklyn), NY	
	28-29			Portsmouth, NH	
September	4-5	Martinsburg, WV		Cleveland, OH	
	4-5			Martinsburg, WV	
	4-6		Cleveland, OH		
	11-12	Corapolis (Pittsburgh), PA	Scott AFB, IL	Corapolis (Pittsburgh), PA	
	11-12			Scott AFB, IL	
	17			Southern Pines, NC	
	18-19	Whiteman AFB, MO	NAS Oceana, VA	Whiteman AFB, MO	Reno, NV
	25-26	McConnell AFB, KS	MCAS Kaneohe Bay, HI		Chico, CA

DATE:		USAF Thunderbirds	USN Blue Angels	USA Golden Knights	Canadian Snowbirds
October	1-3		MCAS Miramar, CA		MCAS Miramar, CA
	2-3	Salinas, CA		MCAS Miramar, CA	
	2-3			Jackson, MS	
	9-10	Little Rock AFB, AR	San Francisco, CA	Little Rock, AFB, AR	Daytona Beach, FL
	16-17	El Paso, IX	Dobbins AFB, GA	El Paso, TX	Atlanta, GA
	23-24	Houston, TX	NAS Jacksonville, FL	Washington, DC	
	30-31	Cocoa Beach, FL	Ft Worth Alliance, TX	Ft Worth Alliance, TX	
November	6-7	Lackland AFB, TX	Homestead ARB, FL	Lackland AFB, TX	
	6-7			Homestead ARB, FL	
	11-14			Ft Bragg, NC	
	12-13		NAS Pensacola, FL		
	13-14	Nellis AFB, NV			

Note: Dates and locations are scheduled ''show dates'' only and do not reflect arrival or practice date TFR periods that may precede the specific aerial demonstration events listed above. Again, pilots are strongly encouraged to check FDC NOTAMs to verify they have the most current information regarding any airspace restrictions.

Washington DC SFRA Special Terms & Procedures

Procedures for Traffic Pattern Work:

Towered Airport: Request pattern work from tower; squawk 1234, remain in two-way communication with tower.

Non-Towered Airport: File DC SFRA flight plan; obtain and squawk discrete transponder code, communicate pattern position via published CTAF, and have ability to monitor VHF guard on 121.5 or UHF guard on 243.0

ATC Terms Specific to the DC SFRA:

Security services: Identification, communications and security tracking provided by an ATC facility in support of DOD, or other security elements. *NOTE*: *Security services do not include basic radar services or any other ATC services.*

Transponder observed: Used to inform a pilot that the aircraft's assigned beacon code and position has been observed. This transmission does *not* imply ATC services. It conveys only that the transponder reply has been observed and its position correlated for movement through security airspace.

Remain on the code until you land: Used when Potomac hands an inbound VFR flight off to the tower or authorizes change to advisory frequency for non-towered airports. It reminds pilots to remain on the assigned discrete transponder code until after landing. *NEVER squawk 1200 inside the DC SFRA.*

Emergency Procedures:

Transponder failure: An aircraft unable to transmit the ATC-assigned transponder code must contact ATC and comply with all instructions. If unable to contact ATC, the aircraft must exit the DC SFRA by the most direct lateral route.

Intercepts: Review interception procedures in the AIM. If you are intercepted, follow all instructions given by the intercepting aircraft. Monitor 121.5, provide call sign / position, and squawk 7700 unless otherwise directed.

Potomac TRACON Telephone Numbers

Area Name	Nearest major airport)	Telephone
Shenandoah	Dulles (IAD)	1-866-709-4993 1-540-349-4097
Mount Vernon	Reagan National (DCA) Andrews AFB (ADW)	1-866-599-3874 1-540-349-0493
Chesapeake	Baltimore (BWI)	1-866-429-5882 1-540-349-8478
James River	Richmond (RIC) Charlottesville (CHO)	1-866-640-4124 1-540-349-9697

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Washington DC SFRA Standard Requirements

Requirements to operate to/from, or within the DC SFRA
(effective 0001 EST 17 February 2009)

1. Two-way radio

2. Operating transponder with altitude reporting (Mode C)

3. Flight plan appropriate to intended operation:

 IFR: IFR flight plan
 VFR: DC SFRA flight plan for all operations, *except*:

 - Fringe airport egress (*no flight plan required*)
 - Towered airport pattern work (*make request to tower*)

4. Discrete transponder code for all operations, *except*:

 - Leesburg (JYO) ingress (1227) or egress (1226)
 - Fringe airport egress (1205)
 - Towered airport pattern work (1234)

5. VFR speed restriction (≤ 180 KIAS in DC SFRA, & ≤ 230 KIAS from 30 NM - 60 NM from DCA VOR/DME unless otherwise authorized.)

6. Communication with ATC for all operations, *except*:

 - Leesburg (JYO) ingress/egress: make CTAF calls
 - Fringe airport egress: monitor guard if able
 - Towered airport pattern work: talk to tower
 - Non-towered airport pattern work:
 - Make CTAF calls & monitor guard if able

Activate: A DC SFRA flight plan to enter/exit the DC SFRA under VFR activates when the pilot obtains a discrete transponder code *except*:

- Leesburg (JYO) ingress/egress: with CTAF calls
- Fringe airport egress: when pilot squawks 1205
- Towered airport pattern: with squawk & talk
- Non-towered airport pattern: with CTAF calls

Closing: The DC SFRA flight plan closes when the aircraft exits or lands at an airport inside the DC SFRA.

Washington DC SFRA VFR Outbound Procedures*

Step 1: Preflight—File a DC SFRA Flight Plan

- *ALWAYS* review NOTAMs for current TFR information.
- File DC SFRA flight plan.
 "I would like to file a DC SFRA flight plan for VFR flight from (departure airport) to (appropriate exit gate)"
- If desired, file separate VFR flight plan (search-and-rescue) to be activated after exiting the DC SFRA.

Step 2: Pre-Takeoff — Activate DC SFRA Flight Plan

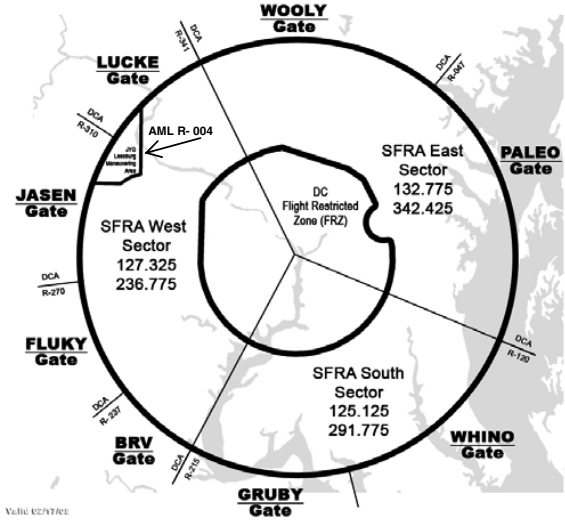
- Call ATC (tower, RCO, phone) for frequency & squawk.
 "Potomac Clearance, (call sign) at Tipton, VFR departure."
- Set assigned frequency & transponder code.
- Verify that Mode C (ALT) is on.

Step 3: After Takeoff—Communicate w/ ATC

- Establish radio contact with Potomac TRACON.
 "Potomac Departure, (call sign), off Tipton"
- Monitor assigned frequency
- Remain out of Class B unless explicitly cleared to enter.

Step 4: Exiting—Close DC SFRA Flight Plan

- Remain on frequency/squawk until ATC authorizes change; DC SFRA flight plan closes upon exiting the DC SFRA.



***ALWAYS** check NOTAMs!*

Washington DC SFRA VFR Inbound Procedures*

Step 1: Preflight—File a DC SFRA Flight Plan

- *ALWAYS* review NOTAMs for current TFR information.
- File DC SFRA flight.
 "I would like to file a DC SFRA flight plan for VFR flight from (appropriate entry gate) to (destination airport)."

Step 2: Before Entry - Activate DC SFRA Flight Plan

- Before entry, call Potomac to request transponder code.
 "Potomac Approach, (call sign), VFR inbound to Gaithersburg."
- Set assigned code and verify that Mode C (ALT) is on.
- Continue inbound unless otherwise instructed.
- Remain out of Class B unless explicitly cleared to enter.

Step 3: After Entry—Communicate w/ ATC

- Monitor Potomac TRACON.
- Remain out of Class B airspace unless explicitly cleared to enter.

Step 4: Arriving—Close DC SFRA Flight Plan

- Change to tower / advisory frequency when so instructed .
- Remain on assigned transponder code until you land.
- DC SFRA flight plan closes upon landing.

Entry/Exit Filing Gates for DC SFRA Flight Plans

Gate (Freq)	Defining Radials (DCA)		Visual Checkpoints	
WOOLY (132.775)	R-341	R-044	I-270	I-95
PALEO (132.775)	R-045	R-119	I-95	Abeam Chesapeake Beach
WHINO (125.125)	R-120	R-172	Abeam Chesapeake Beach	Northern boundary Wicomico River
GRUBY (125.125)	R-173	R-214	Northern boundary Wicomico River	Western boundary Potomac River / Widewater Beach
BRV (127.325)	R-215	R-236	Western boundary Potomac River / Widewater Beach	West side of Lunga Reservoir
FLUKY (127.325)	R-237	R-269	West side of Lunga Reservoir	VA Route 29
JASEN (127.325)	R-270	R-309	VA Route 29	VA Route 7
LUCKE (127.325)	R-310	R-339	VA Route 7	I-270

*See page 1 for JYO ingress/egress & fringe airport egress procedures.
For detailed information, see online DC SFRA course at www.faasafety.gov

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EASTON, MARYLAND NOISE ABATEMENT PROCEDURE

When Easton Airport Traffic Control Tower is closed:

Departure RWY 22: Right turn and avoid overflight of Town of Easton. Departure RWY 04: Left turn at end of RWY to parallel HWY 50 until past mobile home park.

No intersection take offs. VFR Arrivals: Report the Miles River bridge, 2.7 miles southwest of the airport at 2000′ MSL for sequence to all RWYS. Contact 410–770–8055.

WEST ATLANTIC ROUTE SYSTEM (WATRS)

Effective immediately, all operators entering New York Center's West Atlantic Route System (WATRS) southbound on ATS Routes L453, L454, L455, L456, L457, L459, L461, and L462, shall file and plan the following routing.

SOUTHBOUND
SOUTHBOUND WATRS PLUS ROUTE STRUCTURE ACCESS FROM NEW YORK METROPOLITAN AREA

All operators entering New York Center's West Atlantic Route System (WATRS) southbound on ATS routes: L453, L454, L455, L456, L457, L459, L461 AND L462 shall flight plan and file the following routes:

ATS ROUTE	WATRS ACCESS ROUTING (SOUTHBOUND ONLY)
For L453;	. . . LINND–AZEZU–L453 . . .
For L453 VIA B24;	. . . B24–AZEZU–L453 . . .
For L454;	. . . LINND–ROLLE–ATUGI–L454 . . .
For L454 VIA B24;	. . . B24–WEBBB–ROLLE–ATUGI–L454 . . .
For L455;	. . . LINND–RESQU–UMEDA–L455 . . .
For L455 VIA B24;	. . . B24–WEBBB–RESQU–UMEDA–L455 . . .
For L456;	. . . LINND–SQUAD–DARUX–L456 . . .
For L456 VIA B24;	. . . B24–WEBBB–RESQU–DARUX–L456 . . .
For L457;	. . . LINND–RESQU–UMEDA–L457 . . .
For L457 VIA B24;	. . . B24–WEBBB–RESQU–UMEDA–L457 . . .
For L459;	. . . LINND–SQUAD–DARUX–L459 . . .
For L459 VIA B24;	. . . B24–WEBBB–RESQU–DARUX–L459 . . .
For L461;	. . . LINND–KINGG–KINER–L461 . . .
For L462;	. . . LINND–KAYYT–L462 . . .
For L462 VIA ACK;	. . . ACK–J97–LACKS–KAYYT–L462 . . .

EASTBOUND
TRANSITION TO NEW YORK OCEANIC CTA/FIR

VIA: ORF AR9 ZIBUT

All operators transitioning the New York Center West Atlantic Route System (WATRS) via ZIBUT intersection, en route to the New York Center North Atlantic MNPS airspace, are encouraged to flight plan via:

ZIBUT direct **LARGE** direct SLATN or JOBOC or DOVEY

Operators opting to flight plan via any other fix or latitude/longitude coordinates east of ZIBUT intersection shall expect no higher than FL290 and may be rerouted to accommodate WATRS non–radar traffic.

NOTE–This route may be filed bi–directionally

NORTHBOUND
NORTHBOUND WATRS PLUS ROUTE STRUCTURE ACCESS TO NEW YORK METROPOLITAN AREA

All northbound operators exiting New York Center's West Atlantic Route System (WATRS) on routes L453, L454, L455, L456, L457, L459, L461 AND L462 shall flight plan and file the following transition routes to join domestic routing:

ATS ROUTE	WATRS EXIT ROUTING (NORTHBOUND ONLY)
From L453;	. . . AZEZU–BERGH . . .
From L454;	. . . OKONU–L454–BERGH . . .
From L454 TO B24;	. . . OKONU–L454–WEBBB–B24 . . .
From L455;	. . . SAVIK–L455–BERGH . . .
From L455 TO B24;	. . . SAVIK–AZEZU–B24 . . .
From L456;	. . . MARIG–BERGH . . .
From L457;	. . . OKONU–L457–BERGH . . .
From L457 TO B24;	. . . OKONU–L457–WEBBB–B24 . . .
From L459;	. . . SAVIK–L459–BERGH . . .
From L459 TO B24;	. . . SAVIK–AZEZU–B24 . . .
From L461;	. . . MARIG–BERGH . . .
From L462;	. . . KAYYT–BERGH. . . . or KAYYT–LACKS–ACK . . .

WAKE TURBULENCE FOR INTERSECTION DEPARTURES
Teterboro Airport (TEB)
Teterboro, New Jersey

Teterboro Airport Traffic Control Tower has been granted a waiver to the guidelines that require a 3–minute interval for a small aircraft departing from an intersection behind a preceding departing large aircraft. This waiver authorizes the tower to depart small aircraft from the intersection of RWY 01 and Twy Kilo without requiring a 3–minute interval behind a preceding large aircraft that departs from the end of the runway.

AEROBATIC PRACTICE AREA
Roxbury, Connecticut

Aerobatic practice area will be conducted between the altitudes of 2500 ft and 4500 ft MSL and performed within an approximate 2 mile radius of a point defined from the CARMEL VOR (CMK) as the 052 degree radial/21.9 GPS–DME fix. It is 8 NM NW of the Oxford, CT airport (OXC).

SEARCH LIGHT DEMONSTRATION
Baltimore, Maryland
Downtown, at the Inner Harbor
Each evening, seven days per week

A vertical search light beam demonstration will be conducted at the Pier V Hotel, at Baltimore Inner Harbor, Baltimore, Maryland, BAL 028/7. Lat N39°17′24″, Long W76°36′27″. Search light beams are being radiated from the SFC upward. Flashblindness or cockpit illumination may occur at several miles distance. The Leesburg Automated Flight Service Station, 1–703–771–3696 is the FAA coordination facility.

LASER BASED ATMOSPHERIC RESEARCH
INTERVALE VILLAGE/MOUNT WASHINGTON VALLEY
Bartlett, New Hampshire

Laser based atmospheric research will be conducted at Intervale Village in the town of Bartlett, New Hampshire. The ''Ground Winds'' system is a research laser that will be located at Latitude 44°05′56.24″ North, Longitude 071°09′31.25″ West (NAD83), or BML 195 032. Laser research will be conducted continuously.

The laser light will project at a fixed 45° angle, as measured from the horizon, from the surface to 60,000 feet and beyond. When activated, the light will be at a fixed azimuth. However, the azimuth will periodically change. At 10,000 feet in altitude, the internal cone will only be 10 miles in diameter, but only projecting in one direction (azimuth) at any time. Avoid airborne hazard, this beam may be injurious to Pilots/Aircrews and passengers eyes within 9 nautical miles. The secondary effects of Flash blindness or Cockpit Illumination may occur at great distances. The Bostin Air Route Traffic Control Center, (603) 879–6655, is the FAA coordination facility.

Laser Light Activity
Canobie Lake Water Park, Salem, New Hampshire

Laser light shows are being conducted at the Canobie Lake Water Park in Salem, NH. Show orientation and laserbeam projections will be directed in all 360° directions. Laser light beams may be injurious to pilot's/passenger's eyes within 3,000 feet laterally of the light source and surface to 1,650 feet AMSL. The secondary effects of flash blindness or cockpit illumination may occur beyond these distances. The laser will be stationed at N42°47′32″/W071°14′44″ (LWM 310/7.4 DME). Manchester ATCT 1–603–666–7591 will be the coordination facility.

LASER LIGHT DEMONSTRATION
Atlantic City, New Jersey

Laser light demonstrations are being conducted at the Atlantic Park, downtown Atlantic City, New Jersey, 0001–0700 UTC, ACY VORTAC 145/8.5. Approximately: 39°21′31″N/74°26′15″W. Laser light beam may be injurious to pilots/passengers eyes within 100 feet above ground, 100 feet AMSL, 900 feet laterally of the light source. The secondary effects of flash blindness or cockpit illumination may occur beyond these distances. The Atlantic City ATCT, 609–641–3940, is the coordination facility.

LASER LIGHT DEMONSTRATION
Darien Lake Theme Park, Darien Center, New York

Laser light demonstrations are being conducted at the Darien Lake Theme Park, Darien Center, NY. The show orientation and laser beam projection are directed to the southern half of a circle form this site. Buffalo VOR/DME 100R/12NM. (42°56′04″N/78°23′30″W). Laser light beams may be injurious to pilot's/passenger's eyes within 2,800 feet of the light source, 1,600 feet above ground level. The secondary effect of flash blindness or cockpit illumination may occur beyond these distances. The Buffalo ATCT, 716–633–0664 is the FAA coordination facility.

LASER LIGHT DEMONSTRATIONS
DORNEY THEME PARK, DORNEYVILLE, PENNSYLVANIA

Laser light demonstrations are being conducted at the Dorney Theme Park, northwest of Dorneyville, PA. Show orientation and laserbeam projections directed to the southern quadrant from FJC 210D/10DME (N40°34′47″/W75°32′06″). Laser light beams may be injurious to pilot's/passenger's eyes within 2000 ft laterally of the light source, 500 ft AGL, 1100 ft AMSL. The secondary effects of flash blindness or cockpit illumination may occur beyond these distances. Allentown ATCT, 1–610–264–4539 is the FAA coordination facility.

MODEL AIRCRAFT ACTIVITY, HARFORD COUNTY MARYLAND

Radio controlled model aircraft operating to 800 feet AGL vicinity of N39°37′30″ W76°18′35″ in Harford County, Maryland.

INTERSECTION DEPARTURES DURING PERIOD OF DARKNESS
GENERAL EDWARD LAWRENCE LOGAN INTERNATIONAL AIRPORT (BOS)
BOSTON, MASSACHUSETTS

Boston Logan International Airport Traffic Control Tower has been granted a waiver to the guideline that prohibits the control tower from taxiing an aircraft into ''position and hold'' at an intersection, between sunset and sunrise.

This waiver will allow the tower to taxi the aircraft into ''position and hold'' during period of darkness, at the intersections listed below.

Runway 04R at Taxiway Charlie

Runway 22L at Taxiway Charlie

Aircraft shall not taxi into position and hold under the provisions of this waiver when the subject intersection is not visible from the tower. When the provisions of this waiver are being exercised, the affected runways shall be used for departures only. Intersection departures will continue to be utilized at other locations between sunset and sunrise. However, aircraft cannot be taxied into ''position and hold'' prior to takeoff clearance.

INTERSECTION DEPARTURES DURING PERIOD OF DARKNESS
NEWARK LIBERTY INTERNATIONAL AIRPORT (EWR)
NEWARK, NEW JERSEY

Newark International Airport Traffic Control Tower has been granted a waiver to the guidelines that prohibits the control tower from taxiing an aircraft into ''position and hold'' at an intersection, between sunset and sunrise.

This waiver allows the tower to taxi aircraft into ''position and hold'' during period of darkness, at the intersections listed below.

Runway 22R at Taxiway Whiskey
Runway 22L at Taxiway Whiskey
Runway 29 at Taxiway Romeo

Aircraft shall not taxi into position and hold under the provisions of this waiver when the subject intersection is not visible from the tower. When the provisions of this waiver are being exercised, the affected runways shall be used for departures only. Intersection departures will continue to be utilized at other locations between sunset and sunrise. However, aircraft cannot be taxied into ''position and hold'' prior to takeoff clearance.

INTERSECTION DEPARTURES DURING PERIOD OF DARKNESS
JOHN F KENNEDY INTERNATIONAL AIRPORT (JFK)
NEW YORK, NEW YORK

Kennedy Airport Traffic Control Tower has been granted a waiver to the guidelines that prohibits the control tower from taxiing an aircraft into ''position and hold'' at an intersection, between sunset and sunrise.

This waiver allows the tower to taxi aircraft into ''position and hold'' during period of darkness, at the intersections listed below.

Runway 13R at Taxiway Papa Delta
Runway 22R at Taxiway Charlie
Runway 31L at Taxiway Kilo Kilo
Runway 31R at Taxiway Zulu Alpha

Aircraft shall not taxi into position and hold under the provisions of this waiver when the subject intersection is not visible from the tower. When the provisions of this waiver are being exercised, the affected runways shall be used for departures only. Intersection departures will continue to be utilized at other locations between sunset and sunrise. However, aircraft cannot be taxied into ''position and hold'' prior to takeoff clearance.

INTERSECTION DEPARTURES DURING PERIOD OF DARKNESS
PITTSBURGH INTERNATIONAL AIRPORT (PIT)
PITTSBURGH, PENNSYLVANIA

Pittsburgh Airport Traffic Control Tower has been granted a waiver to the guidelines that prohibits the control tower from taxiing an aircraft into ''position and hold'' at an intersection, between sunset and sunrise.

This waiver allows the tower to taxi the aircraft into ''position and hold'' during periods of darkness, at the intersections listed below.

Runway 28L at Taxiway Papa

Aircraft shall not taxi into position and hold under the provisions of this waiver when the subject intersection is not visible from the tower. When the provisions of this waiver are being exercised, the affected runways shall be used for departures only. Intersection departures will continue to be utilized at other locations between sunset and sunrise. However, aircraft cannot be taxied into ''position and hold'' prior to takeoff clearance.

INTERSECTING RUNWAY OPERATIONS
NEWARK LIBERTY INTERNATIONAL AIRPORT (EWR)
NEWARK, NEW JERSEY

Newark Liberty International (EWR) Airport Traffic Control Tower (ATCT) has been authorized to conduct intersecting runway operations to Runway 29 and Runway 04R whereby an aircraft arriving Runway 29 shall be through the intersection of Runway 04R prior to the arriving aircraft on Runway 04R reaching a point no closer than 5,000 feet from the intersection of both runways.

INTERSECTING RUNWAY OPERATIONS
PHILADELPHIA INTERNATIONAL AIRPORT (PHL)
PHILADELPHIA, PENNSYLVANIA

Philadelphia International Airport Control Tower has been granted a waiver that authorizes air traffic personnel to conduct simultaneous ILS approaches to Runway 26 while aircraft simultaneously depart Runway 27R.

LAND AND HOLD SHORT LIGHTS (for LAHSO)
BOSTON–LOGAN AIRPORT, MASSACHUSETTS

Land and Hold Short lights have been installed on four runways at Boston–Logan Airport (BOS). These in–pavement lighting systems will remain on/flashing whenever LAHSO is expected to be conducted to that particular runway. Flight crews should also expect to see these lights on/flashing even when authorized the full length of the runway for landing, or when utilizing that runway for departure.

Land and Hold Short lights have been installed at the following locations:

Runway 22L (Short of Runway 27/09)

Runway 4L (Short of Runway 33R/15L)

Runway 27 (Short of Runway 22L/04R)

Runway 15R (Short of Runway 09/27)

CHARLESTON, WEST VIRGINIA

Mine blasting approximately 25 NM south and southeast of Charleston, West Virginia as follows:

Mine Blasting HVQ VORTAC 110° 25 DME to 400′ AGL

Mine Blasting HVQ VORTAC 189° 26 DME to 300′ AGL

CAUTION—FISH SPOTTING ACTIVITY—CHESAPEAKE BAY AND COASTAL WATERS

Caution is advised for extensive fish spotter aircraft activity between May 1 and December 1 upwards from 1500 feet above the surface over the Chesapeake Bay and adjacent coastal waters. Pilots should be alert for this activity. For further information contact FAA/Norfolk ATCT on 1–757–460–5142.

BOSTON, MASSACHUSETTS

To avoid the concentration of aircraft arriving and departing Boston, pilots requesting IFR flight at and below altitudes 14,000 feet MSL should file for airways beyond 40 NM from Boston VORTAC between the hours of 0800-2100 local. Traffic to/from Maine and Cape may file V167.

BOURNE, MASSACHUSETTS

Aircraft operation below 2000 ft and within 3 miles of Pave Paws radar site located in Restricted Area 4101 may experience momentary erratic operation of cockpit instruments or navigational equipment. Pilots are encouraged to submit reports of such occurrences to nearest FAA Air Traffic Facility.

SPECIAL NORTH ATLANTIC, CARIBBEAN AND PACIFIC AREA COMMUNICATIONS

VHF air-to-air frequencies enable aircraft engaged in flights over remote and oceanic areas out of range of VHF ground stations to exchange necessary operational information and to facilitate the resolution of operational problems.

Frequencies have been designated as follows:

North Atlantic area:	123.45 MHz
Caribbean area:	123.45 MHz
Pacific area:	123.45 MHz

MILITARY TRAINING ROUTES

The DOD Flight Information Publication AP/1B provides textual and graphic descriptions and operating instructions for all military training routes (IR, VR, SR) and refueling tracks/anchors. Complete and more comprehensive information relative to policy and procedures for IRs and VRs is published in FAA Handbook 7610.4 (Special Military Operations) which is agreed to by the DOD and therefore directive for all military flight operations. The AP/1B is the official source of route data for military users.

CIVIL USE OF MILITARY FIELDS:

U.S. Army, Air Force, Navy and Coast Guard Fields are open to civil fliers only in emergency or with prior permission. Army Installations, prior permission is required from the Commanding Officer of the installation.

For Air Force installations, prior permission should be requested at least 30 days prior to first intended landing from either Headquarters USAF (PRPOC) or the Commander of the installation concerned (who has authority to approve landing rights for certain categories of civil aircraft). For use of more than one Air Force installation, requests should be forwarded direct to Hq USAF (PRPOC), Washington, D.C. 20330.

Use of USAF installations must be specifically justified.

For Navy and Marine Corps installations, prior permission should be requested at least 30 days prior to first intended landing. An Aviation Facility License must be approved and executed by the Navy prior to any landing by civil aircraft.

Forms and further information may be obtained from the nearest U.S. Navy or Marine Corps aviation activity.

For Coast Guard fields prior permission should be requested from the Commandant, U.S. Coast Guard via the Commanding Officer of the field.

When instrument approaches are conducted by civil aircraft at military airports, they shall be conducted in accordance with the procedures and minimums approved by the military agency having jurisdiction over the airport.

AIRCRAFT LANDING RESTRICTIONS

Landing of aircraft at locations other than public use airports may be a violation of Federal or local law. All land and water areas are owned or controlled by private individuals or organizations, states, cities, local governments, or U.S. Government agencies. Except in emergency, prior permission should be obtained before landing at any location that is not a designated public use airport or seaplane base.

Landing of aircraft is prohibited on lands or waters administered by the National Park Service, U.S. Fish and Wildlife Service, U.S. Forest Service, and on many areas controlled by the U.S. Army Corps of Engineers, unless prior authorization is obtained from the respective agency.

CONTINUOUS POWER FACILITIES

In order to insure that a basic ATC system remains in operation despite an areawide or catastrophic commercial power failure, key equipment and certain airports have been designated to provide a network of facilities whose operational capability can be utilized independent of any commercial power supply.

In addition to those facilities comprising the basic ATC system, the following approach and lighting aids have been included in this program for a selected runway.

1. ILS (Localizer, Glide Slope, COMLO, Inner, Middle and Outer Markers)
2. Wind Measuring Capability
3. Approach Light System (ALS) or Short ALS (SALS)
4. Ceiling Measuring Capability
5. Touchdown Zone Lighting (TDZL)
6. Centerline Lighting (CL)
7. Runway Visual Range (RVR)
8. High Intensity Runway Lighting (HIRL)
9. Taxiway Lighting
10. Apron Light (Perimeter Only)

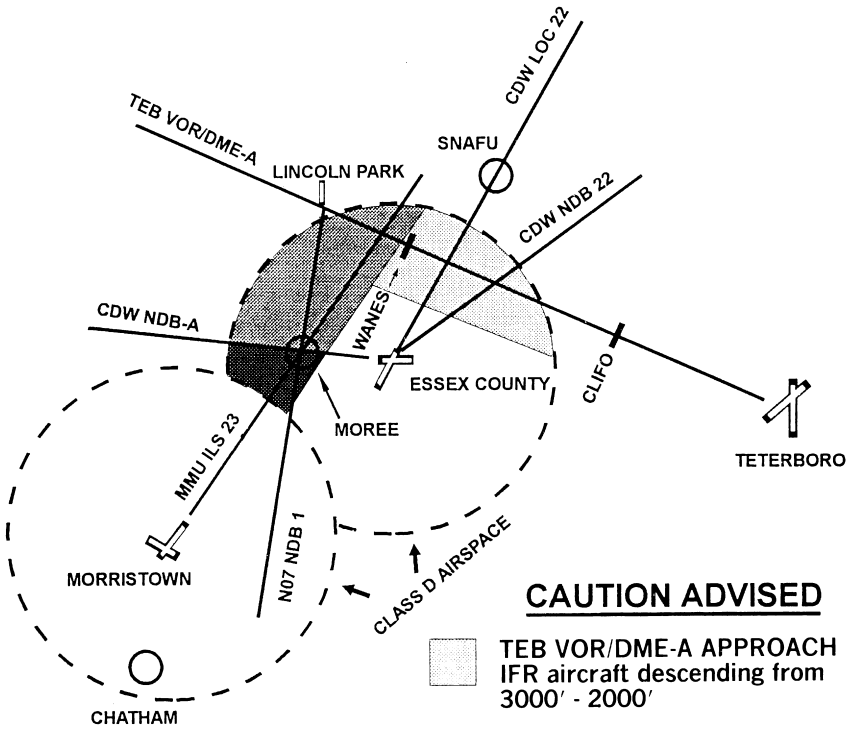
The following have been designated ''Continuous Power Airports,'' and have independent back up capability for the equipment installed.

Airport/Ident	Runway No.	Airport/Ident	Runway No.
Albuquerque, NM (ABQ)	08	Milwaukee, WI (MKE)	01L
Anchorage, AK (ANC)	07R	Minneapolis, MN (MSP)	30L
Andrews AFB, MD (ADW)	01L	Nashville, TN (BNA)	02L
Atlanta, GA (ATL)	09R	New Orleans, LA (MSY)	10
Baltimore, MD (BWI)	10	New York, NY (JFK)	04R
Bismarck, ND (BIS)	31	New York, NY (LGA)	22
Boise, ID (BOI)	10R	Newark, NJ (EWR)	04R
Boston, MA (BOS)	04R	Oklahoma City, OK (OKC)	35R
Charlotte, NC (CLT)	36L	Omaha, NE (OMA))	14R
Chicago, IL (ORD)	10	Ontario, CA (ONT)	26L
Cincinnati, OH (CVG)	36C	Philadelphia, PA (PHL)	09R
Cleveland, OH (CLE)	06R	Phoenix, AZ (PHX)	08
Dallas/Fort Worth, TX (DFW)	17C	Pittsburgh, PA (PIT)	10L
Denver, CO (DEN)	35R	Reno, NV (RNO)	16R
Des Moines, IA (DSM)	31	Salt Lake City, UT (SLC)	34L
Detroit, MI (DTW)	03R	San Antonio, TX (SAT)	12R
El Paso, TX (ELP)	22	San Diego, CA (SAN)	09
Fairbanks, AK (FAI)	01L	San Francisco, CA (SFO)	28R
Great Falls, MT (GTF)	03	San Juan, PR (SJU)	08
Honolulu, HI (HNL)	08L	Seattle, WA (SEA)	16C
Houston, TX (IAH)	26L	St. Louis, MO (STL)	30R
Indianapolis, IN (IND)	05L	Tampa, FL (TPA)	36L
Jacksonville, FL (JAX)	07	Tulsa, OK (TUL)	36R
Kansas City, MO (MCI)	19R	Washington, DC (DCA)	01
Los Angeles, CA (LAX)	24R	Washington, DC (IAD)	01R
Memphis, TN (MEM)	36L	Wichita, KS (ICT)	01L
Miami, FL (MIA)	08R		

NOTE—The existing CPA runway is listed. Pending and future changes at some locations will require a revised runway designation.

CALDWELL - TETERBORO - MORRISTOWN

INSTRUMENT APPROACH - AIRSPACE INTERACTION CHART



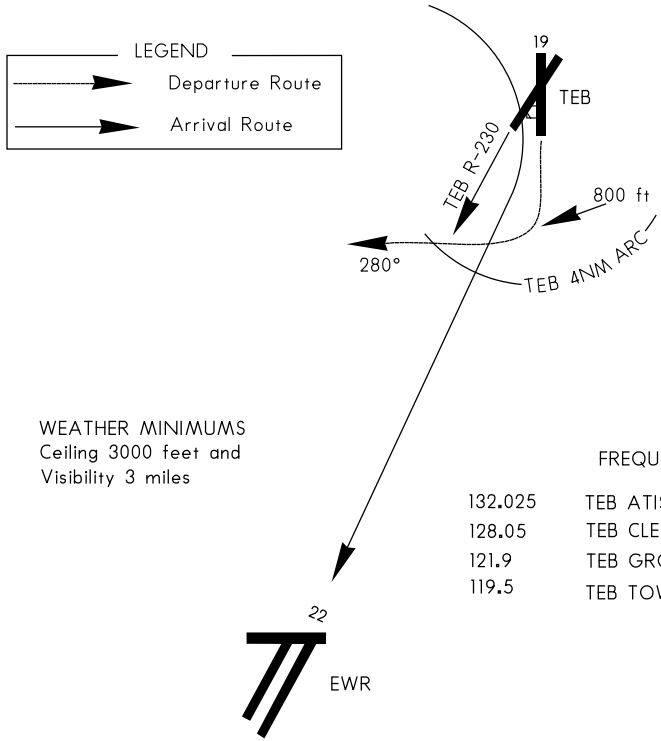
TERMINAL AREA GRAPHIC NOTICE

(Not to be used for Navigation)

Teterboro (TEB) Airport Runway 19 VFR Departure Procedure with Transition to an IFR Clearance when Newark is landing Runway 22 and Teterboro is departing Rwy 19.

"DALTON DEPARTURE PROCEDURE"

PILOTS SHOULD SPECIFICALLY REQUEST THIS PROCEDURE USING THE ABOVE NAME.



WEATHER MINIMUMS
Ceiling 3000 feet and
Visibility 3 miles

FREQUENCIES

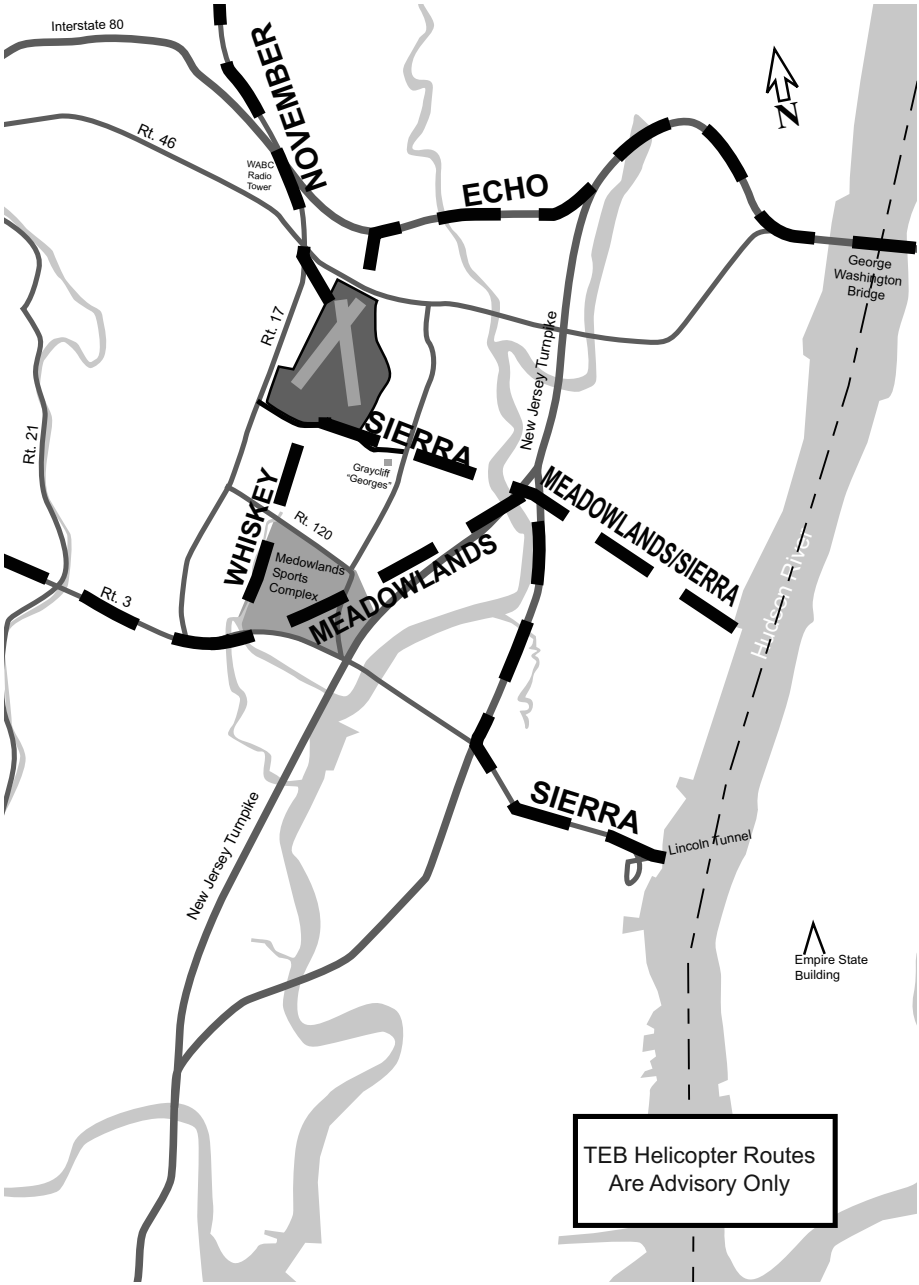
132.025	TEB ATIS
128.05	TEB CLEARANCE DELIVERY
121.9	TEB GROUND CONTROL
119.5	TEB TOWER

FLY RUNWAY HEADING UNTIL 800 FEET, THEN TURN RIGHT HEADING 280. COMPLETE THE TURN RIGHT WITHIN 4 DME FROM TEB. MAINTAIN VFR AT OR BELOW 1,300 FEET; DO NOT EXCEED 190 KNOTS. IF UNABLE, ADVISE.

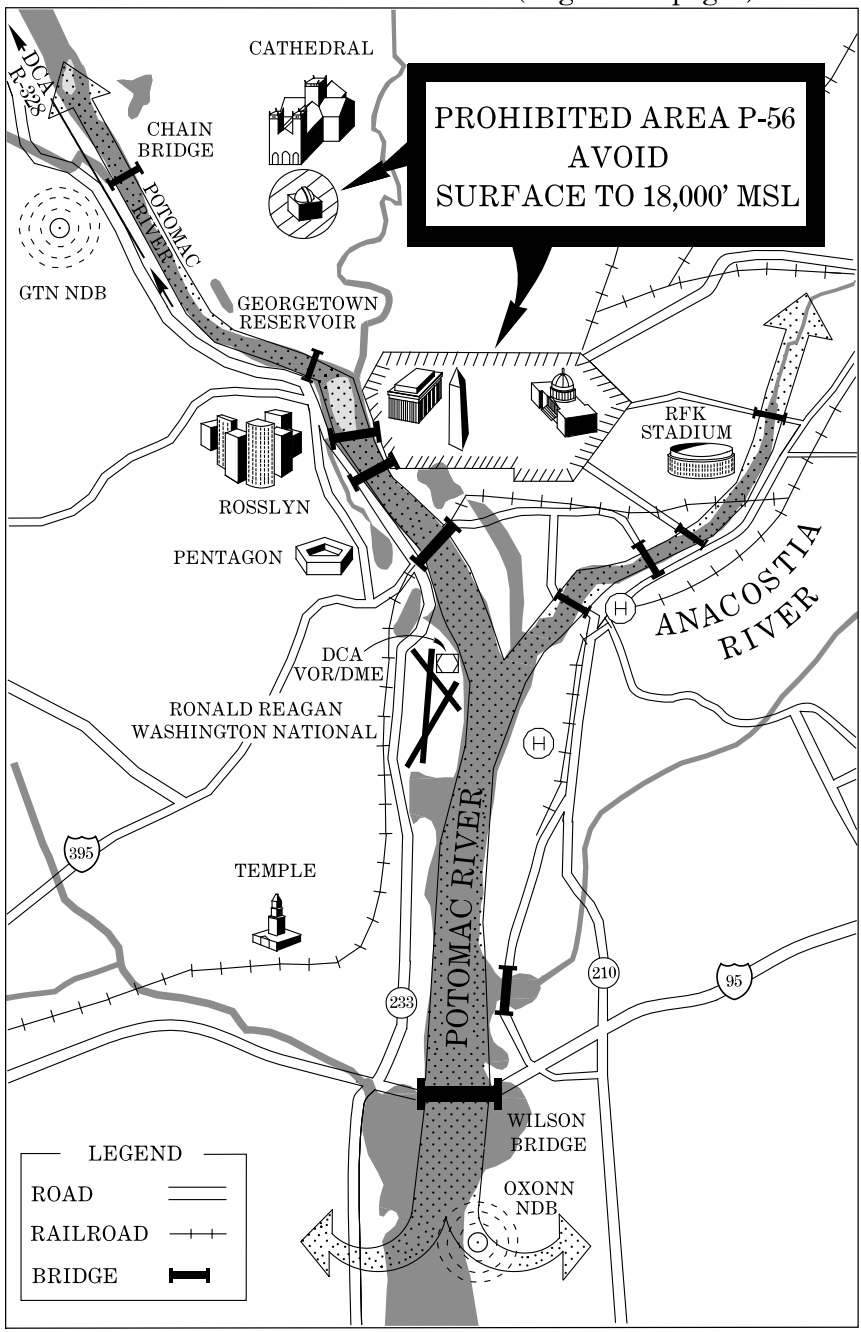
EXPECT A CLIMB CLEARANCE AFTER CROSSING THE TEB R-230. THE CLIMB CLEARANCE CONSTITUTES IFR ACTIVATION AND PILOTS ARE EXPECTED TO RESUME NORMAL AIRSPEED. EXPECT CONTROL INSTRUCTION TO A DEPARTURE FIX AS DESCRIBED IN THE PUBLISHED TEB STANDARD INSTRUMENT DEPARTURE.

NOTE: CAUTION WAKE TURBULENCE. NEWARK ARRIVALS DESCENDING OVERHEAD FROM 3000′ TO 1800′.

TETERBORO HELICOPTER ROUTES



RONALD REAGAN WASHINGTON NATIONAL AIRPORT NOISE ABATEMENT & PROHIBITED AREA (P-56) AVOIDANCE PROCEDURES (Page 1 of 2 pages)



RONALD REAGAN WASHINGTON NATIONAL AIRPORT
NOISE ABATEMENT & PROHIBITED AREA (P–56) AVOIDANCE PROCEDURES
(Page 2 of 2 pages)

P–56 BEGINS APPROXIMATELY 1.5 NM NORTH OF THE DEPARTURE END OF RUNWAY 01–SURFACE TO 18,000′ MSL
REMAIN CLEAR OF P–56 AT ALL TIMES

EXPECT THE PUBLISHED RNAV DEPARTURE PROCEDURE OR ATC INSTRUCTIONS FOR THE FOLLOWING NON–RNAV PROCEDURES

NORTHWEST: Follow the Potomac River until abeam the Georgetown reservoir or the DCA 4 DME, then join the DCA 328 radial, expect radar vectors at 10 DME. A left turn as soon as practicable, especially with a west wind, is required to maintain a ground track over the Potomac River and **remain clear of P–56**. If unable to maintain visual reference to the Potomac River, join the DCA 328 radial.

NORTHEAST: Follow the Anacostia River to 5 DME. A right turn as soon as practicable, especially with a east wind, is required to maintain a ground track over the Anacostia River and **remain clear of P–56**. Expect Radar Vectors at 5 DME. If unable to maintain visual reference to the Anacostia River, then join the DCA 070 radial.

SOUTH: Follow the Potomac River to 5 DME, then expect radar vectors. If unable to maintain visual reference to the Potomac river, then join the DCA 185 radial.

ARRIVAL PROCEDURES

LANDING NORTH: Weather conditions 3000/4 or better, expect the Mount Vernon visual approach. Lower weather conditions, expect the advertised instrument approach.

LANDING SOUTH: Weather conditions 3500/3 or better, expect the River Visual Approach. Lower weather conditions, expect the advertised instrument approach.

NIGHTTIME NOISE LEVELS

From 2200 to 0700 local time, operation of aircraft type and model which exceed the following noise levels violate Metropolitan Washington Airport Authority Regulation (MWAR) 3.11:

DEPARTURES – 72 dBA as generated on takeoff.

ARRIVALS – 85 dBA as generated on approach, except that aircraft scheduled to arrive before 2200 will be permitted to land if they have received an approach clearance before 2230. Ref. MWAR 3.11 and Advisory Circular 36–3.

NIAGARA FALLS FLIGHT RESTRICTION AREA

Part 93—Special Air Traffic Rules; Subpart E—Flight Restrictions in the Vicinity of Niagara Falls, New York

§ 93.71 General operating procedures

(a) Flight restrictions are in effect below 3,500 feet MSL in the airspace above Niagara Falls, New York, west of a line from latitude 43°06′33″N., longitude 78°03′30″W. (the Whirlpool Rapids Bridge) to latitude 43°04′47″N., longitude 79°02′44″W. (the Niagara River Inlet) to latitude 43°04′29″N., longitude 79°03′30″W. (the International Control Dam) to the United States/Canadian Border and thence along the border to the point of origin.

(b) No flight is authorized below 3,500 feet MSL in the area described in paragraph (a) of this section, except for aircraft operations conducted directly to or from an airport/heliport within the area, aircraft operating on an ATC-approved IFR flight plan, aircraft operating the Scenic Falls Route pursuant to approval of Transport Canada, aircraft carrying law enforcement officials, or aircraft carrying properly accredited news representatives for which a flight plan has been filed with Buffalo NY (BUF) Automated Flight Service Station (AFSS).

(c) Check with Transport Canada for flight restrictions in Canadian airspace. Commercial air tour operations approved by Transport Canada will be conducting a north/south orbit of the Niagara Falls area below 3,500 feet MSL over the Niagara River.

(d) The minimum altitude for VFR flight over the Scenic Falls area is 3,500 feet MSL.

(e) Comply with the following procedures when conducting flight over the area described in paragraph (a) of this section:

(1) Fly a clockwise pattern;

(2) Do not proceed north of the Rainbow Bridge;

(3) Prior to joining the pattern, broadcast flight intentions on frequency 122.05 Mhz, giving altitude and position, and monitor the frequency while in the pattern;

(4) Use the Niagara Falls airport altimeter setting. Contact Niagara Falls Airport Traffic Control Tower to obtain the current altimeter setting, to facilitate the exchange of traffic advisories/restrictions, and to reduce the risk of midair collisions between aircraft operating in the vicinity of the Falls. If the Control Tower is closed, use the appropriate Automatic Terminal Information Service (ATIS) Frequency;

(5) Do not exceed 130 knots;

(6) Anticipate heavy congestion of VFR traffic at or above 3,500 feet MSL; and

(7) Use caution to avoid high-speed civil and military aircraft transiting the area to or from Niagara Falls Airport.

(f) These procedures do not relieve pilots from the requirements of Sec. 91.113 of this chapter to see and avoid other aircraft.

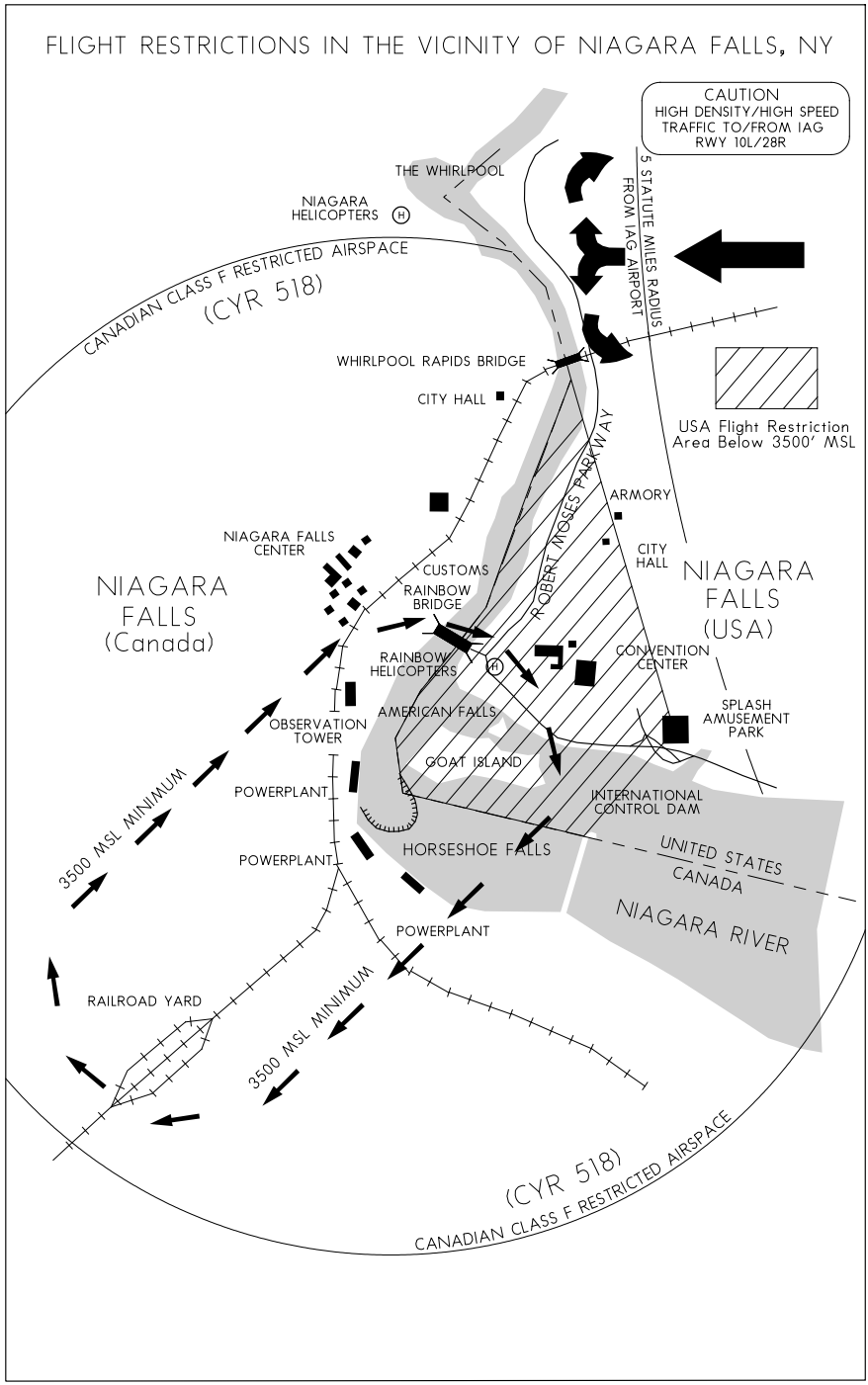
(g) Flight following, to and from the area, is available through Buffalo Approach.

ADVISORY: AMUSEMENT ATTRACTION–NIAGARA FALLS, NY

An amusement attraction similar to a moored balloon will be conducted daily, 0700–2400 LCL, April 1 through October 31, 5 miles SW of the Niagara Falls Intl Airport (IAG), approx. BUF305/021, on the American side of Rainbow Bridge, Niagara Falls, NY, at altitudes up to 1050′MSL/500′AGL. For further information contact Buffalo AFSS on 1–716–631–3756.

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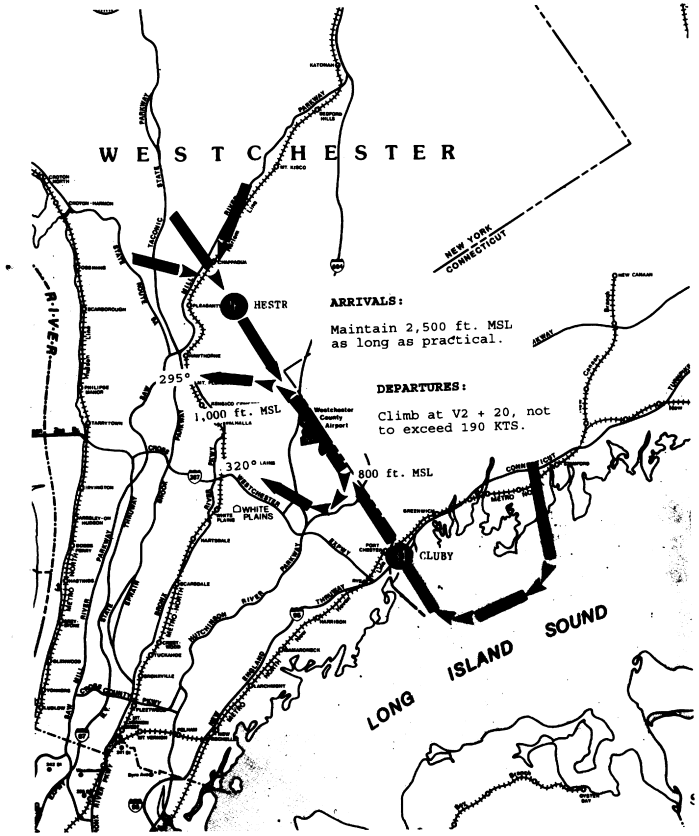
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TERMINAL AREA GRAPHIC NOTICE
(NOT TO BE USED FOR NAVIGATION)

White Plains, New York
WESTCHESTER COUNTY AIRPORT NOISE ABATEMENT PROCEDURES

Noise abatement procedures in effect at all times, contact 914–995–4861.
Airport located in noise sensitive area. Noise monitoring and positive aircraft and helicopter event identification in effect at all times.
High Range Noise Event program: Operators that cause noise levels at or above 93 dBA will be contacted.
Voluntary restraint from flying time period is from midnight to 6:30 am local time. Limit use of reverse thrust.
Run-ups: Must receive prior approval from airport operations. No aircraft with certificated maximum gross weight in excess of 120,000 lbs shall land or take off at the airport without prior permission of the Airport Manager.
For all aircraft above 12,500 lbs: Use SIDs and STARs for noise abatement, conditions permitting; utilize Sound Visual Approach to Runway 34; turn final for Runway 16 outside outer marker.
All runways: Utilize NBAA ''standard'' departure procedures, or AC91–53A ''distant'' noise abatement departure procedure.
Light aircraft: Runway 34 departures north and eastbound, fly over interstate until reaching 1,500 feet MSL, then on course.
Touch-and-go's: Runway 29 recommended traffic pattern in effect.
Helicopters: Use New York Helicopter Route Chart for noise abatement, fly routes at or above 2,000 ft MSL.
Copies of noise abatement procedures are available.



TERMINAL AREA GRAPHIC NOTICE
(NOT TO BE USED FOR NAVIGATION)

Nantucket, Massachusetts
Nantucket Memorial Airport VFR Noise Abatement Procedures

Noise abatement procedures in effect at all times, contact (508) 325-7531. Additional detailed noise abatement procedures via internet at **www.NantucketAirport.com/noise.htm.**

ARRIVALS

CONTACT NANTUCKET TOWER (118.3) 15 MILES OUT FOR LANDING INSTRUCTIONS

SINGLE ENGINES - (Pattern speed 130 knots or less) Plan to overfly island high (2000'+ AGL). Expect L/R base landing Runway 30 or Runway 33 when x-winds are under 12 knots. Descend offshore for landing whenever possible.

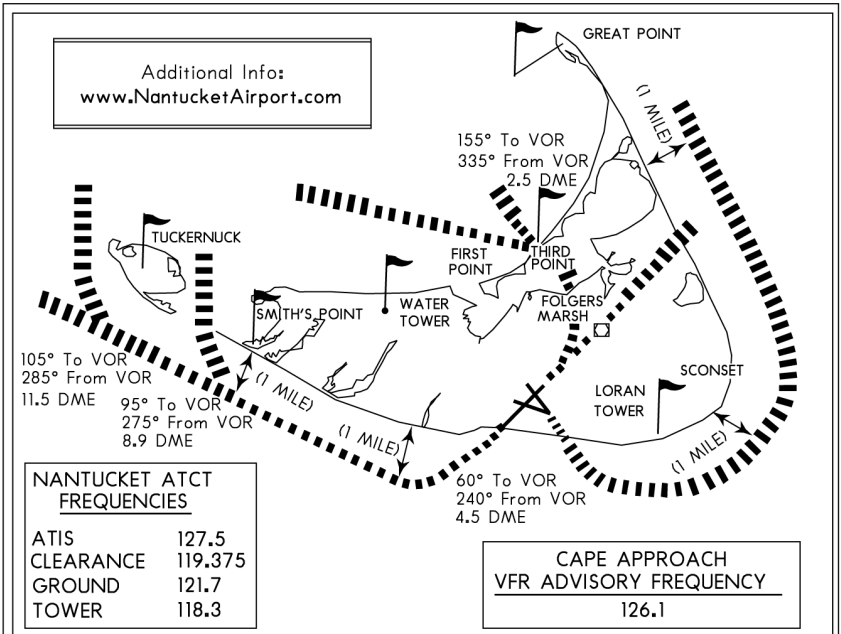
TWINS - Remain over water and expect to land on Runway 24 (wind permitting). Contact Tower for landing sequence abeam Great Point. Cross Third Point at 1000' AGL.
Follow Folgers Marsh (right base) for landing on Runway 24.

TURBOPROPS/JETS - Remain over water and expect straight in approach to Runway 24 (wind permitting). Enter final approach offshore outside Outer Marker.

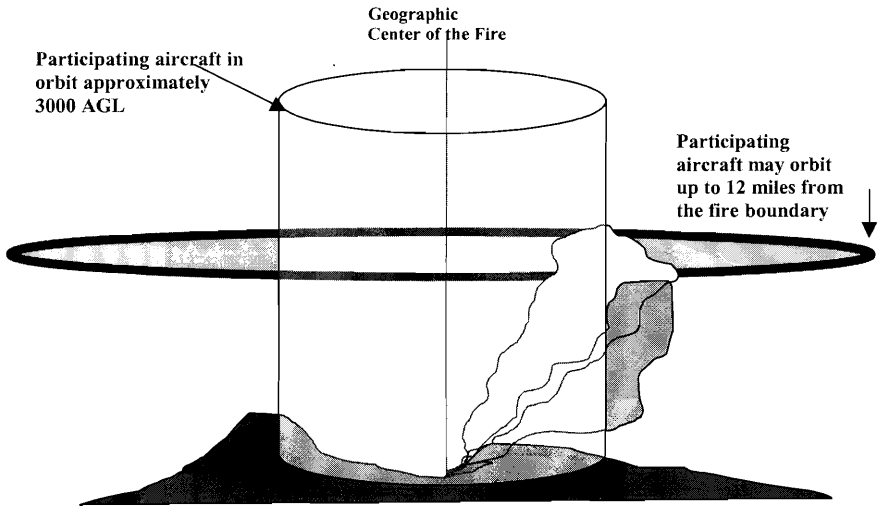
DEPARTURES

Make maximum use of over water departure routes, maintaining 1 mile offshore and avoid island crossings whenever possible.

GENERAL AVIATION/AIRLINE CORRIDORS



FIREFIGHTING TRAFFIC AREAS



Pilots are advised to stay clear of Firefighting Traffic Areas. Remain 15 miles from the area of activity. If you must over-fly the area, do so at an altitude of 5000 feet AGL above. However, to remain safe and out of the way of working aircraft, it is best to circumnavigate the area.

The wild-land fire environment can be very complex and involve a large number and variety of aircraft types including fixed and rotary wing aircraft. Some of the aircraft are small single and multi-engine command and control platforms that can be especially difficult to see and may give the appearance that the fire is not staffed. The aircraft participating in firefighting can orbit as far out as 12 miles from the perimeter of the fire. Any intrusion by aircraft not directly involved in the firefighting operation could delay the delivery of much needed retardant or water to ground firefighters and will adversely affect the safety of participating aircraft. Please stay well away from wild-land fires even if you feel that aircraft are not working the fire; they may be en route or unseen.

If you see a fire developing along your route, report it immediately to air traffic control who will advise the US Forest Service. The firefighting community would welcome this information.

The following narratives summarize the FAR Part 93 Special Air Traffic Rules, and Airport Traffic Patterns in effect as prescribed in the rule. This information is advisory in nature and in no way relieves the pilot from compliance with the specific rules set forth in FAR Parts 91 and 93.

Special Airport Traffic Areas prescribed in Part 93 are depicted on Sectional Aeronautical Charts, World Aeronautical Charts, Enroute Low Altitude Charts, and where applicable, on VFR Terminal Area Charts.

OPERATIONS RESERVATIONS FOR HIGH DENSITY TRAFFIC AIRPORTS KENNEDY, LAGUARDIA, AND WASHINGTON REAGAN NATIONAL

The Federal Aviation Administration (FAA) has designated New York's Kennedy and LaGuardia Airports and Washington Reagan National Airport as High Density Traffic Airports (HDTA), Title 14, Code of Federal Regulations, part 93, subpart K, and has prescribed air traffic rules and requirements for operating aircraft (excluding helicopters) to and from those airports during certain hours.

Reservations are required for operations from 6 a.m. through 11:59 p.m. local time at LaGuardia Airport and Washington Reagan National Airport. Reservations at Kennedy Airport are required from 3 p.m. through 7:59 p.m. local time.

Reservation procedures are detailed in Advisory Circular 93–1, Reservations for Unscheduled Operations at High Density Traffic Airports. A copy of the advisory circular is available on the FAA website at http://www.faa.gov. Reservations for unscheduled operations are allocated through the Enhanced Computer Voice Reservation System (e–CVRS) accessible via telephone or the Internet. This system may not be used to make reservations for scheduled air carrier or commuter flights.

The toll–free telephone number for accessing e–CVRS is 1–800–875–9694 and is available for calls originating within the United States, Canada, and the Caribbean. Users outside the toll–free areas may access e–CVRS by calling the toll number of 703–707–0568. The Internet web address for accessing the e–CVRS is http://www.fly.faa.gov/ecvrs. If you have any questions about reservation requirements or are experiencing problems with the system, you may telephone the Airport Reservation Office at the Air Traffic Control System Command Center at (703) 904–4452.

Requests for instrument flight rules (IFR) reservations will be accepted beginning 72 hours prior to the proposed time of operation at the high–density airport. For example, a request for an 11 a.m. reservation on a Thursday will be accepted beginning at 11 a.m. on the previous Monday.

IFR reservations must be obtained prior to IFR landing or takeoff at an HDTA during slot controlled hours. An air traffic control (ATC) clearance does not constitute a reservation. A reservation does not constitute permission to operate at an HDTA if additional operational limits or procedures are required by NOTAM and/or regulation.

Aircraft involved in medical emergencies will be handled by ATC without regard to a reservation after obtaining prior approval of the ATC System Command Center on (703) 904–4452. ATC will accommodate declared other emergency situations without regard to slot reservations.

NOTE: Visual flight rule (VFR) reservations via ATC for unscheduled operations at LaGuardia are not authorized from 7 a.m. through 8:59 a.m. local time and 4 p.m. through 6:59 p.m. local time, Monday through Friday and Sunday evenings, unless otherwise announced by NOTAM. Both IFR and VFR operations during those time periods must obtain an advance reservation through e–CVRS.

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FSS
TELEPHONE NUMBERS

Flight Service Station (FSS) facilities provide flight planning and weather briefing services to pilots. FSS services in the contiguous United States, Hawaii and Puerto Rico, are provided by a network of large FSS facilities and a few select remote facilities some of which operate part-time. Because of the interconnectivity between the facilities, all FSS services including radio frequencies are available continuously using published data.

Telephone Information Briefing Service (TIBS) is a FSS service that provides continuous recordings of meteorological and/or aeronautical information. A touch-tone telephone is required to fully utilize this service.

Further information can be found in the Aeronautical Information Manual (AIM).

NATIONAL FSS TELEPHONE NUMBER

Pilot Weather Briefings	1–800–WX–BRIEF (1–800–992–7433)

OTHER FSS TELEPHONE NUMBERS (except in Alaska)

TIBS (see description above)	1–877–4TIBS–WX (1–877–484–2799)
Clearance Delivery Only	1–888–766–8267
Lifeguard Flights Only	1–877–LIF–GRD3 (1–877–543–4733)
Flights within DC SFRA & FRZ *	1–866–225–7410

* District of Columbia Special Flight Rules Area & Flight Restricted Zone

KEY to AERODROME FORECAST (TAF) and AVIATION ROUTINE WEATHER REPORT (METAR)

TAF KPIT 091730Z 091818 15005KT 5SM HZ FEW020 WS010/31022KT
FM1930 30015G25KT 3SM SHRA OVC015 TEMPO 2022 1/2SM +TSRA OVC008CB
FM0100 27008KT 5SM SHRA BKN020 OVC040 PROB40 0407 1SM -RA BR
FM1015 18005KT 6SM -SHRA OVC020 BECMG 1315 P6SM NSW SKC

METAR KPIT 091955Z COR 22015G25KT 3/4SM R28L/2600FT TSRA OVC010CB 18/16 A2992 RMK SLP045 T01820159

Forecast	Explanation	Report
TAF	Message type: TAF-routine or TAF AMD-amended forecast, METAR-hourly, SPECI-special or TESTM-non-commissioned ASOS report	**METAR**
KPIT	ICAO location indicator	**KPIT**
091730Z	Issuance time: ALL times in UTC "Z", 2-digit date, 4-digit time	**091955Z**
091818	Valid period: 2-digit date, 2-digit beginning, 2-digit ending times	
	In U.S. **METAR**: CORrected ob; or AUTOmated ob for automated report with no human intervention; omitted when observer logs on	**COR**
15005KT	Wind: 3 digit true-north direction, nearest 10 degrees (or VaRiaBle); next 2-3 digits for speed and unit, KT (KMH or MPS); as needed, Gust and maximum speed; 00000KT for calm; for **METAR**, if direction varies 60 degrees or more, Variability appended, e.g. 180V260	**22015G25KT**
5SM	Prevailing visibility: in U.S., Statute Miles & fractions; above 6 miles in **TAF** Plus6SM. (Or, 4-digit minimum visibility in meters and as required, lowest value with direction)	**3/4SM**
	Runway Visual Range: R; 2-digit runway designator Left, Center, or Right as needed; "/"; Minus or Plus in U.S., 4-digit value, FeeT in U.S., (usually meters elsewhere); 4-digit value Variability 4-digit value (and tendency Down, Up or No change)	**R28L/2600FT**
HZ	Significant present, forecast and recent weather: see table (on back)	**TSRA**
FEW020	Cloud amount, height and type: SKy Clear 0/8, FEW >0/8-2/8, SCaTtered 3/8-4/8, BroKeN 5/8-7/8, OVerCast 8/8; 3-digit height in hundreds of ft; Towering CUmulus or CumulonimBus in **METAR**; in **TAF**, only CB. Vertical Visibility for obscured sky and height "VV004". More than 1 layer may be reported or forecast. In automated **METAR** reports only, CLeaR for "clear below 12,000 feet"	**OVC010CB**
	Temperature: degrees Celsius; first 2 digits, temperature "/" last 2 digits, dew-point temperature; Minus for below zero, e.g., M06	**18/16**
	Altimeter setting: indicator and 4 digits; in U.S., A-inches and hundredths; (Q-hectoPascals, e.g., Q1013)	**A2992**

KEY to AERODROME FORECAST (TAF) and AVIATION ROUTINE WEATHER REPORT (METAR)

Forecast	Explanation	Report
WS010/31022KT	In U.S. **TAF**, non-convective low-level (≤2,000 ft) Wind Shear; 3-digit height (hundreds of ft); "/"; 3-digit wind direction and 2-3 digit wind speed above the indicated height, and unit, KT	
	In **METAR**, ReMarK indicator & remarks. For example: Sea-Level Pressure in hectoPascals & tenths, as shown: 1004.5 hPa; Temp/ dew-point in tenths °C, as shown: temp. 18.2°C, dew-point 15.9°C	**RMK SLP045 T01820159**
FM1930	FroM and 2-digit hour and 2-digit minute **beginning** time: indicates significant change. Each FM starts on new line, indented 5 spaces.	
TEMPO 2022	TEMPOrary: changes expected for < 1 hour and in total, < half of 2-digit hour **beginning** and 2-digit hour **ending** time period	
PROB40 0407	PROBability and 2-digit percent (30 or 40): probable condition during 2-digit hour **beginning** and 2-digit hour **ending** time period	
BECMG 1315	BECoMinG: change expected during 2-digit hour **beginning** and 2-digit hour **ending** time period	

Table of Significant Present, Forecast and Recent Weather - Grouped in categories and used in the order listed below; or as needed in TAF, No Significant Weather.

QUALIFIER

Intensity or Proximity

- Light "no sign" Moderate + Heavy

VC Vicinity: but not at aerodrome; in U.S. **METAR**, between 5 and 10SM of the point(s) of observation; in U.S. **TAF**, 5 to 10SM from center of runway complex (elsewhere within 8000m)

Descriptor

MI Shallow	BC Patches	PR Partial	TS Thunderstorm
BL Blowing	SH Showers	DR Drifting	FZ Freezing

WEATHER PHENOMENA

Precipitation

DZ Drizzle	RA Rain	SN Snow	SG Snow grains
IC Ice crystals	PL Ice pellets	GR Hail	GS Small hail/snow pellets

UP Unknown precipitation in automated observations

Obscuration

BR Mist (≥5/8SM)	FG Fog (<5/8SM)	FU Smoke	VA Volcanic ash
SA Sand	HZ Haze	PY Spray	DU Widespread dust

Other

SQ Squall	SS Sandstorm	DS Duststorm	PO Well developed dust/sand whirls
FC Funnel cloud	+FC tornado/waterspout		

- Explanations in parentheses "()" indicate different worldwide practices.
- Ceiling is not specified; defined as the lowest broken or overcast layer, or the vertical visibility.
- NWS **TAFs** exclude turbulence, icing & temperature forecasts; NWS **METARs** exclude trend fcsts
- Although not used in US, Ceiling And Visibility OK replaces visibility, weather and clouds if: visibility ≥10 km; no cloud below 5000 ft (1500 m) or below the highest minimum sector altitude, whichever is greater and no CB; and no precipitation, TS, DS, SS, MIFG, DRDU, DRSA or DRSN.

UNITED STATES DEPARTMENT OF COMMERCE
NOAA/PA 96052 **National Oceanic and Atmospheric Administration**—National Weather Service

FAA AND NWS
KEY AIR TRAFFIC FACILITIES

Air Traffic Control System Command Center

Main Number.....703–904–4400

RGNL AIR TRAFFIC DIVISIONS

REGION	TELEPHONE
Alaskan	907–271–5464
Central	816–329–2500
Eastern	718–553–4502
Great Lakes	847–294–7202
New England	781–238–7500
Northwest Mountain	425–227–2500
Southern	404–305–5500
Southwest	817–222–5500
Western Pacific	310–725–6500

AIR ROUTE TRAFFIC CONTROL CENTERS (ARTCCs)

ARTCC NAME	*24 HR RGNL DUTY OFFICE TELEPHONE #	BUSINESS HOURS	BUSINESS TELEPHONE #
Albuquerque	817–222–5006	7:30 a.m.–4:00 p.m.	505–856–4300
Anchorage	907–271–5936	7:30 a.m.–4:00 p.m.	907–269–1137
Atlanta	404–305–5180	7:30 a.m.–5:00 p.m.	770–210–7601
Boston	617–238–7001	7:30 a.m.–4:00 p.m.	603–879–6633
Chicago	847–294–8400	8:00 a.m.–4:00 p.m.	630–906–8221
Cleveland	847–294–8400	8:00 a.m.–4:00 p.m.	440–774–0310
Denver	425–227–1389	7:30 a.m.–4:00 p.m.	303–651–4100
Ft. Worth	817–222–5006	7:30 a.m.–4:00 p.m.	817–858–7300
Houston	817–222–5006	7:30 a.m.–4:00 p.m.	281–230–5300
Indianapolis	847–294–8400	8:00 a.m.–4:00 p.m.	317–247–2231
Jacksonville	404–305–5180	8:00 a.m.–4:30 p.m.	904–549–1501
Kansas City	816–329–3000	7:30 a.m.–4:00 p.m.	913–254–8500
Los Angeles	661–265–8200	7:30 a.m.–4:00 p.m.	661–265–8200
Memphis	404–305–5180	7:30 a.m.–4:00 p.m.	901–368–8103
Miami	404–305–5180	7:00 a.m.–3:30 p.m.	305–716–1500
Minneapolis	847–294–8400	8:00 a.m.–4:00 p.m.	651–463–5580
New York	718–995–5426	8:00 a.m.–4:40 p.m.	516–468–1001
Oakland	310–725–3300	6:30 a.m.–3:00 p.m.	510–745–3331
Salt Lake City	425–227–1389	7:30 a.m.–4:00 p.m.	801–320–2500
Seattle	425–227–1389	7:30 a.m.–4:00 p.m.	253–351–3500
Washington	718–995–5426	8:00 a.m.–4:30 p.m.	703–771–3401

MAJOR TERMINAL RADAR APPROACH CONTROLS (TRACONs)

TRACON NAME	*24 HR RGNL DUTY OFFICE TELEPHONE #	BUSINESS HOURS	BUSINESS TELEPHONE #
Atlanta	404–305–5180	7:00 a.m.–3:30 p.m.	404–669–1200
Chicago	847–294–8400	8:00 a.m.–4:00 p.m.	847–608–5509
Dallas/Ft. Worth	817–222–5006	7:30 a.m.–4:00 p.m.	972–615–2500
Denver	425–227–1389	7:30 a.m.–4:00 p.m.	303–342–1500
Houston	817–222–5006	7:30 a.m.–4:00 p.m.	281–230–8400
New York	718–995–5426	8:00 a.m.–4:30 p.m.	516–683–2901
Northern CA	310–725–3300	7:00 a.m.–3:30 p.m.	916–366–4001
Potomac	718–995–5426	8:00 a.m.–4:30 p.m.	540–349–7500
Southern CA	310–725–3300	7:30 a.m.–4:00 p.m.	858–537–5800

*Facilities can be contacted through the Rgnl Duty Officer during non-business hours.

KEY AIR TRAFFIC FACILITIES

DAILY NAS REPORTABLE AIRPORTS

AIRPORT NAME	*24 HR RGNL DUTY OFFICE TELEPHONE #	BUSINESS HOURS	BUSINESS TELEPHONE #
Albuquerque Intl Sunport, NM	817–222–5006	8:00 a.m.–5:00 p.m.	505–842–4366
Andrews AFB, MD	718–995–5426	8:00 a.m.–4:30 p.m.	301–735–2380
Baltimore/Washington Intl Thurgood Marshall, MD	718–995–5426	8:00 a.m.–4:30 p.m.	410–962–3555
Boston Logan Intl, MA	781–238–7001	7:30 a.m.–4:00 p.m.	617–455–3100
Bradley Intl, CT	617–238–7001	7:30 a.m.–4:00 p.m.	203–627–3428
Burbank/Bob Hope, CA	310–725–3300	7:00 a.m.–5:30 p.m.	818–567–4806
Charlotte Douglas Intl, NC	404–305–5180	8:00 a.m.–4:30 p.m.	704–344–6487
Chicago Midway, IL	847–294–8400	8:00 a.m.–4:00 p.m.	773–884–3670
Chicago O'Hare Intl, IL	847–294–8400	8:00 a.m.–4:00 p.m.	773–601–7600
Cleveland Hopkins Intl, OH	847–294–8400	8:00 a.m.–4:00 p.m.	216–898–2020
Covington/Cincinnati, OH	708–294–7401	8:00 a.m.–4:30 p.m.	606–767–1006
Dallas/Ft. Worth Intl, TX	817–222–5006	8:30 a.m.–5:00 p.m.	972–615–2531
Dayton Cox Intl, OH	847–294–8400	7:30 a.m.–4:00 p.m.	937–454–7300
Denver Intl, CO	425–227–1389	7:30 a.m.–4:00 p.m.	303–342–1600
Detroit Metro, MI	847–294–8400	8:00 a.m.–4:00 p.m.	734–955–5000
Fairbanks Intl, AK	907–271–5936	7:30 a.m.–4:00 p.m.	907–474–0050
Fort Lauderdale Intl, FL	404–305–5180	7:00 a.m.–3:30 p.m.	305–356–7932
George Bush Intercontinental/Houston, TX	817–222–5006	7:30 a.m.–4:00 p.m.	713–230–8400
Hartsfield–Jackson Atlanta Intl, GA	404–305–5180	7:00 a.m.–3:30 p.m.	404–669–1200
Honolulu Intl, HI	310–643–3200	7:30 a.m.–4:00 p.m.	808–840–6100
Houston Hobby, TX	817–222–5006	8:00 a.m.–5:00 p.m.	713–847–1400
Indianapolis Intl, IN	847–294–8400	8:00 a.m.–4:00 p.m.	317–484–6600
Kahului/Maui, HI	310–643–3200	7:30 a.m.–4:00 p.m.	808–877–0725
Kansas City Intl, MO	816–329–3000	7:30 a.m.–4:00 p.m.	816–329–2700
Las Vegas McCarran, NV	310–725–3300	7:30 a.m.–4:00 p.m.	702–262–5978
Los Angeles Intl, CA	310–725–3300	7:00 a.m.–3:30 p.m.	310–342–4900
Louis Armstrong New Orleans Intl, LA	817–222–5006	7:00 a.m.–4:30 p.m.	504–471–4300
Memphis Intl, TN	404–305–5180	7:30 a.m.–4:00 p.m.	901–322–3350
Miami Intl, FL	404–305–5180	7:00 a.m.–4:00 p.m.	305–869–5400
Minneapolis/St. Paul, MN	847–294–8400	8:00 a.m.–4:00p.m.	612–713–4000
Nashville Intl, TN	404–305–5180	7:00 a.m.–3:30 p.m.	615–781–5460
New York Kennedy Intl, NY	718–995–5426	8:00 a.m.–4:30 p.m.	718–656–0335
New York La Guardia, NY	718–995–5426	8:00 a.m.–4:30 p.m.	718–335–5461
Newark Liberty Intl, NJ	718–995–5426	7:30 a.m.–4:00 p.m.	973–565–5000
Norman Y. Mineta San Jose Intl, CA	310–643–3200	7:30 a.m.–4:00 p.m.	408–982–0750
Ontario Intl, CA	310–643–3200	7:30 a.m.–4:00 p.m.	909–983–7518
Orlando Intl, FL	404–305–5180	7:30 a.m.–5:00 p.m.	407–850–7000
Philadelphia Intl, PA	718–995–5426	8:00 a.m.–4:30 p.m.	215–492–4100
Phoenix Sky Harbor Intl, AZ	310–643–3200	7:30 a.m.–4:00 p.m.	602–379–4226
Pittsburgh Intl, PA	718–995–5426	8:00 a.m.–4:30 p.m.	412–269–9237
Portland Intl, OR	425–227–1389	7:30 a.m.–4:00 p.m.	503–493–7500
Raleigh-Durham, NC	404–305–5180	8:00 a.m.–4:30 p.m.	919–840–5544
Ronald Reagan Washington National, DC	718–995–5426	8:00 a.m.–4:30 p.m.	703–413–1535
Salt Lake City, UT	425–227–1389	7:30 a.m.–4:00 p.m.	801–325–9600
San Antonio Intl, TX	817–222–5006	8:00 a.m.–4:30 p.m.	210–805–5507
San Diego Lindbergh Intl, CA	310–725–3300	8:00 a.m.–4:30 p.m.	619–299–0677
San Francisco Intl, CA	310–643–3200	7:00 a.m.–3:30 p.m.	650–876–2883
San Juan Intl, PR	404–305–5180	7:30 a.m.–5:00 p.m.	809–253–8663
Seattle–Tacoma Intl, WA	425–227–1389	7:30 a.m.–4:00 p.m.	206–768–2900
St. Louis Lambert, MO	816–329–3000	7:30 a.m.–4:00 p.m.	314–890–1000
Tampa Intl, FL	404–305–5180	7:30 a.m.–4:00 p.m.	813–371–7700
Ted Stevens Anchorage Intl, AK	907–271–5936	7:30 a.m.–4:00 p.m.	907–271–2700
Teterboro, NJ	718–995–5426	8:00 a.m.–4:30 p.m.	201–288–1889
Washington Dulles Intl, DC	718–995–5426	8:00 a.m.–4:30 p.m.	703–661–6031
West Palm Beach, FL	404–305–5180	8:00 a.m.–4:30 p.m.	561–683–1867
Westchester Co, NY	718–995–5426	8:00 a.m.–4:30 p.m.	914–948–6520

*Facilities can be contacted through the Rgnl Duty Officer during non-business hours.

Air Route Traffic Control Center frequencies and their remoted transmitter sites are listed below for the coverage of this volume. Bold face type indicates high altitude frequencies, light face type indicates low altitude frequencies. To insure unrestricted IFR operations within the high altitude enroute sectors, the use of 720 channel communications equipment (25 kHz channel spacing) is required.

ⓇATLANTA CENTER — **H–6–9–10, L–18–22–24–25–26–36, A–1 (KZTL)**

Greensboro – 128.8 **124.425**
Tri City – 132.9 **126.775 120.725**

ⓇBOSTON CENTER — **H–10–11–12, L–30–31–32–33–34 (KZBW)**

Augusta – 134.95
Barnstable – 132.9 128.75 **127.825**
Berlin – 135.7 135.7
Bucks Harbor – 133.45 133.45
Burlington – 118.825 120.35 120.35
Calverton – 124.525
Caribou – 124.75
Concord – 128.325
Cummington – 132.65
Gardner – 134.7 123.75
Houlton – 128.05 120.25
Hyannis – 133.45 133.45
Islip – 135.8 132.3
Kingston – 134.3
Lake George – 135.325 133.625 128.325 121.35
Lebanon – 134.7
Melrose – 135.55 133.325 119.25
Millinocket – 128.05
Montpelier – 135.7 135.7
Portland – 128.2
Rockdale – 133.25 **126.475**
St. Albans – 128.05 124.25 120.25
Shelton – 135.075 134.0 128.1 **125.575**
Turin – 135.25 133.25 **123.875 120.35**
Utica – 124.125
Waterboro – 128.2 118.55
Woodstock – 135.325 133.425 133.425 127.65 124.85 **118.425.**

REMARKS: The provisions of enroute primary radar not available in the BOSTON ARTCC Watertown, NY area at 12,000′ and below, Rockdale/Utica, NY areas at 11,000′ and below, Delancey, NY area at 7,000′ and below, and in the Syracuse/Georgetown, NY areas at all altitudes.

ⓇCLEVELAND CENTER — **H–2–5–10–11–12, L–27–28–29–30–31–32, A–2 (KZOB)**

Altoona – 132.125 128.45 124.4 121.2
Bradford – 126.725
Dubois – 126.725
Dunkirk – 125.2
Holland – 135.775 120.625
Moon Township – 134.475 254.725 **133.075**
Morgantown – 126.95
Warren – 134.125 132.925 119.725
Waterford – 127.07
Wayland – 127.475 124.325

ⓇINDIANAPOLIS CENTER – 135.25 132.775 119.95 — **H–5–9–10–12, L–16–25–26–27–29 (KZID)**

Bluefield – 126.575
Charleston – 134.225 127.4 **119.525**
Marmet – 134.225 127.4

ⓇNEW YORK CENTER **H–10–11–12, L–29–30–32–33–34–36**
(KZNY)

Arr–Dep US – 133.7
Barnegat – 132.15 132.15
Barnstable – 135.8 125.925
Big Flat – 133.475 132.2
Colts Neck – 118.975
Douglaston – 134.375 133.05
Elk Mountain – 134.45 **132.175** 128.5
Flint Hill – 124.625 134.6 132.1
Huguenot – 132.6
Joliet – 133.675 132.5
Matawan – 125.325 127.175
Millville – 134.325
Modena – 135.45
Nantucket – 121.125
North Mountain – 133.5 **128.575** 123.625 **121.325**
Philipsburg – 134.8 **132.875**
Sayre – 133.35
Ship Bottom – 128.3 133.05
Sparta – 133.15
Williamsport – 124.9

ⓇWASHINGTON CENTER **H–9–10–12, L–24–25–26–29–34–35–36, A–1**
(KZDC)

Arr–Dep US – 135.5 **133.82 133.12 128.52** 127.7 **127.42 124.02** 123.85 **118.82**
Atlantic City – 133.12
Bucks Elbow – 135.4 **133.2** 133.2 **121.675**
Buena Vista – 134.625 134.4 **133.025** 127.925
Cape Charles – 128.525
Cedar Lake – 124.77 124.77
Elkins – 128.6
Falls Church – 126.875 135.525 133.97 132.775
Grantsville – 133.65
Green Bay – 133.725 132.025 127.75 118.75
Hagerstown – 134.15 134.15
Linden – 133.55
Lynchburg – 133.575
Manteo – 124.725
Martinsburg – 132.275
Millville – 125.45 125.45
Modena – 132.525
Patuxent River – 133.9
Roanoke – 134.625
Sea Isle – 127.7
Ship Bottom – 127.025
Smyrna – 132.05
South Boston – 124.05
Whaleyville – 120.75
White Sulfur Springs – 120.85
Wilmington – 135.75

VHF frequencies available at Flight Service Stations and at their remote communication outlets (RCO's) are listed below for the coverage of this volume. Frequencies in bold type are available all altitudes but recommended for use FL180 and above. ''T'' indicates transmit only and ''R'' indicates receive only. RCO's available at NAVAIDS are listed after the NAVAID name. RCO's not at NAVAID's are listed by name.

ALTOONA AFSS

ALLEGHENY VOR/DME 110.0T 122.1R 122.2 122.4
ALTOONA RCO 122.1R 122.2 122.65 123.6
ALTOONA VOR 108.8T
BRADFORD VOR/DME 116.6T 122.1R 122.2 122.3
CLARION VOR/DME 112.9T 122.1R
DU BOIS RCO 122.2
ELLWOOD CITY VORTAC 115.8T 122.1R
ERIE VORTAC 109.4T 122.1R
FRANKLIN VOR 109.6T 122.1R
INDIAN HEAD VORTAC 108.2T 122.1R
JOHNSTOWN VORTAC 113.0T 122.1R 122.65
KEATING VORTAC 116.0T 122.1R
MONTOUR VORTAC 112.0T 122.1R
PHILIPSBURG VORTAC 115.5T 122.1R **122.5** 122.6
REVLOC VOR/DME 110.6T 122.1R
SLATE RUN VORTAC 113.9T 122.1R
ST MARYS RCO 121.3
ST THOMAS VORTAC 115.0T 122.1R
TIDIOUTE VORTAC 117.6T 122.1R
TYRONE VORTAC 114.9T 122.1R

BANGOR AFSS

AUGUSTA VOR/DME 111.4T 122.1R 122.2 122.6
BANGOR RCO 122.2
BELFAST RCO 121.975
BERLIN RCO 122.35
BUCKS HARBOR RCO 122.5
CARIBOU RCO **122.3**
CLAREMONT RCO 122.4
CONCORD RCO 122.2 **122.3**
FRYEBURG RCO 122.55
GREENVILLE RCO **122.3**
HOULTON VOR/DME 116.1T 122.1R 122.2
KEENE VORTAC 109.4T 122.1R
KENNEBUNK VORTAC 117.1T 122.1R
LEBANON VOR/DME 113.7T 122.1R 122.2 122.5
MANCHESTER VOR/DME 114.4T 122.1R
MILLINOCKET VOR/DME 117.9T 122.1R 123.6
PRINCETON VOR/DME 114.3T 122.1R
WATERBORO RCO 122.25
WHITEFIELD RCO 122.4

BRIDGEPORT AFSS

BOSTON VORTAC 112.7T 122.1R 122.4
BRIDGEPORT VOR/DME 108.8T 122.1R 122.2
CHESTER RCO 122.25
FITCHBURG RCO 118.025
GARDNER VORTAC 110.6T 122.1R
GROTON VOR 110.85T 122.1R
HYANNIS RCO 126.425
LAWRENCE VOR/DME 112.5T 122.1R
MADISON VOR/DME 110.4T 122.1R
MANSFIELD RCO 121.725
MARTHAS VINEYARD VOR/DME 114.5T 122.1R
NANTUCKET VOR/DME 116.2T 122.1R
NEW HAVEN VOR/DME 109.8T 122.1R
NORWICH VOR/DME 110.0T 122.1R
PROVIDENCE RCO 122.6
PUTNAM VOR/DME 117.4T 122.1R
QUONSET STATE RCO 122.3
WINDSOR LOCKS RCO 122.3
WORCESTER RCO 122.2

BUFFALO AFSS

BINGHAMTON VORTAC 112.2T 122.1R
BUFFALO RCO 122.1R 122.2 122.6
BUFFALO VOR/DME 116.4T
DUNKIRK VORTAC 116.2T 122.1R
ELMIRA RCO 122.2 122.4
ELMIRA VOR/DME 109.65T
GENESEO VOR/DME 108.2T 122.1R
GEORGETOWN VORTAC 117.8T 122.1R
HANCOCK VOR/DME 116.8T 122.1R
ITHACA VOR/DME 111.8T 122.1R
JAMESTOWN VOR/DME 114.7T 122.1R
ROCHESTER RCO 122.6
ROCKDALE VOR/DME 112.6T 122.1R
UTICA VORTAC 111.2T 122.1R 122.2 122.65
WELLSVILLE VORTAC 111.4T 122.1R

BURLINGTON AFSS

ALBANY VORTAC 115.3T 122.1R 122.2 **122.45**
BARNES VORTAC 113.0T 122.1R
BURLINGTON RCO 122.2 122.6
CHESTER VOR/DME 115.1T 122.1R
GLENS FALLS VORTAC 110.2T 122.1R 122.2 **122.4**
MASSENA RCO 122.2
MONTPELIER RCO 122.2 122.6
NEWPORT RCO 122.5
OGDENSBURG RCO **122.4**
PITTSFIELD RCO **122.05**
PLATTSBURGH VORTAC 116.9T 122.1R
RUTLAND RCO 122.3
SARANAC LAKE VOR/DME 109.2T 122.1R
SPRINGFIELD RCO 122.5
WATERTOWN VORTAC 109.8T 122.1R 122.2 **122.3**

ELKINS AFSS

BECKLEY VORTAC 117.7T 122.1R
BLUEFIELD VORTAC 110.0T 122.1R 122.2 122.65
CHARLESTON VORTAC 117.4T 122.1R 122.2 **122.55**
CLARKSBURG VOR/DME 112.6T 122.1R
CUMBERLAND RCO 122.35
ELKINS VORTAC 122.2 **122.45** 123.6 114.2T 122.1R
GRANTSVILLE VOR/DME 112.3T 122.1R
HENDERSON VORTAC 115.9T 122.1R
HUNTINGTON RCO 122.2 **122.6**
IVY KNOB RCO 124.3
KESSEL VOR/DME 110.8T 122.1R
MARTINSBURG RCO 122.45
MORGANTOWN VORTAC 111.6T 122.1R 122.6
PARKERSBURG VORTAC 108.6T 122.1R 122.4
RAINELLE VOR 116.6T 122.1R
WHEELING VOR/DME 118.65 112.2T 122.1R

LEESBURG AFSS 122.0 122.2 122.6

ARMEL VORTAC 113.5T 122.1R
BALTIMORE VORTAC 115.1T 122.1R 122.2
BROOKE VORTAC 114.5T 122.1R
BUCK'S ELBOW MOUNTAIN RCO 122.2 122.65
CAPE CHARLES VORTAC 112.2T 122.1R
CASANOVA VORTAC 116.3T 122.1R
CHARLOTTESVILLE RCO 122.2 122.65
DANVILLE VOR 113.1T 122.2
FALLS CHURCH RCO 122.2 122.6
FLAT ROCK VORTAC 113.3T 122.1R
FRANKLIN VORTAC 110.6T 122.1R
FREDERICK VOR 109.0T 122.1R
GLADE SPRING VOR/DME 110.2T 122.1R

GORDONSVILLE VORTAC 115.6T 122.1R
HAGERSTOWN VOR 109.8T 122.1R
HARCUM VORTAC 108.8T 122.1R
HOPEWELL VORTAC 112.0T 122.1R
LAWRENCEVILLE VORTAC 112.9T 122.1R
LINDEN VORTAC 114.3T 122.1R
LYNCHBURG VORTAC 109.2T 122.1R
MARTINSBURG VORTAC 112.1T 122.1R
MONTEBELLO VOR/DME 115.3T 122.1R
NEWPORT NEWS RCO 122.2 122.65
NORFOLK VORTAC 116.9T 122.1R
NOTTINGHAM VORTAC 113.7T 122.1R
PATUXENT VORTAC 117.6T 122.1R
PULASKI VORTAC 116.8T 122.1R 122.3
RICHMOND VORTAC 114.1T 122.1R 122.2 **122.4**
ROANOKE VORTAC 109.4T
ROANOKE RGNL/WOODRUM RCO 122.2 122.6 109.4T 122.1R
SALISBURY VORTAC 111.2T 122.1R 122.2 122.3
SNOW HILL VORTAC 112.4T 122.1R 122.6
SOUTH BOSTON VORTAC 110.4T 122.1R
WESTMINSTER VOR/DME 117.9T 122.1R

MILLVILLE AFSS

ATLANTIC CITY VORTAC 108.6T 122.55
BROADWAY RCO 122.35
CEDAR LAKE VORTAC 115.2T 122.1R
COLTS NECK RCO 122.3
COYLE VORTAC 113.4T 122.1R
DUPONT VORTAC 114.0T 122.1R
MILLVILLE RCO 122.1R 122.2 **122.65** 123.65
ROBBINSVILLE VORTAC 113.8T 122.1R 122.45
SEA ISLE VORTAC 114.8T 122.1R
SMYRNA VORTAC 111.4T 122.1R
SOLBERG VOR/DME 112.9T 122.1R
SPARTA RCO 122.5
STILLWATER VOR/DME 109.6T 122.1R
TETERBORO RCO 122.2 **122.65**
WATERLOO VOR/DME 112.6T 122.1R
WOODSTOWN VORTAC 112.8T 122.1R

NEW YORK IFSS

HAMPTON VORTAC 113.6T 122.1R 122.6
HUGUENOT VOR/DME 116.1T 122.1R
KENNEDY VOR/DME 115.9T 122.1R
KINGSTON VOR/DME 117.6T 122.1R
LA GUARDIA VOR/DME 113.1T
NEW YORK RCO 122.2 122.6
POUGHKEEPSIE RCO 122.2 122.4

WILLIAMSPORT AFSS

ALLENTOWN VORTAC 117.5T 122.1R
HARRISBURG VORTAC 112.5T 122.1R 122.2 122.4
LANCASTER VORTAC 117.3T 122.1R
MODENA VORTAC 113.2T 122.1R
NORTH PHILADELPHIA VOR 112.0T 122.2 122.6
POTTSTOWN VORTAC 116.5T
RAVINE VORTAC 114.6T 122.1R
SELINSGROVE VORTAC 110.4T 122.1R
STONYFORK VOR/DME 108.6T 122.1R
WILKES–BARRE RCO 122.2 122.6
WILLIAMSPORT RCO 122.2 122.65
WILLIAMSPORT VOR/DME 114.4T 122.1R
YARDLEY VOR/DME 108.2T

FLIGHT STANDARDS DISTRICT OFFICES (FSDO)

Below is a list of FSDO's in the area of coverage of this directory. These offices serve the aviation industry and the general public on matters relating to certification and operation of general aviation aircraft. Address letters to Manager, Flight Standards District Office-Federal Aviation Administration.

Flight Standards personnel in these offices are responsible for serving the aviation industry and the general public on all matters relating to the certification and operation of general aviation aircraft.

CONNECTICUT

1st Floor, Building 85–214
Bradley International Airport
Windsor Locks, Connecticut 06096–1009
Telephone: 860–654–1000

DISTRICT OF COLUMBIA

Hallmark Building
13873 Park Center Road, Suite 475
Herndon, VA 20171
Telephone: 703–230–7664
Fax: 703–230–7720

MAINE

Portland International Jetport
2 AL McKay Avenue
Portland, Maine 04102
Telephone: 207–780–3263

MARYLAND

890 Airport Park Road
Cromwell Business Park
Glen Burnie, Maryland 21061
Mailing Address
BWI Airport, Maryland 21240
Telephone: 410–787–0040

MASSACHUSETTS

One Cranberry Hill
Fourth Floor, Suite 402
Lexington, Massachusetts 02421-7394
Telephone: 781–274–7130
Fax: 781–274–6725

NEW JERSEY

Park 80 West, Plaza One
Saddlebrook, New Jersey 07663
Telephone: 201–556–6600

NEW YORK

7 Airport Park Boulevard
Latham, New York 12110
Telephone: 518–785–5660

Administrative Building, Suite 235
Route 110, Republic Airport
Farmingdale, New York 11735
Telephone: 631–755–1300

990 Stewart Ave., Suite 630
Garden City, NY 11530–4858
Telephone: 516–228–8033

#1 Airport Way, Suite 110
Rochester, New York 14624
Telephone: 585–436–3880

PENNSYLVANIA

Allegheny County Airport
3000 Lebanon Church Road, Suite 300
West Mifflin, Pennsylvania 15122
Telephone: 412–466–5357

Allentown-Bethlehem-Easton Airport
961 Marcon Blvd., Suite 111
Allentown, Pennsylvania 18103
Telephone: 610–264–2888

Capital City Airport
400 Airport Rd, Room 101
New Cumberland, Pennsylvania 17070
Telephone: 717–774–8271

International Plaza #2, 2nd Floor
Philadelphia, Pennsylvania 19113
Telephone: 610–595–1500

One Thorn Run Center, Suite 200
1187 Thorn Run Extension
Coraopolis, PA 15108
Telephone: 412–262–9034

VIRGINIA

Richmond Intl
5757 Huntsman Rd, Suite 100
Richmond, Virginia 23250-2415
Telephone: 804–222–7494

WEST VIRGINIA

Yeager Airport
301 Eagle Mountain Road, Room 144
Charleston, West Virginia 25311
Telephone: 304–347–5199

PREFERRED IFR ROUTES

A system of preferred routes has been established to guide pilots in planning their route of flight, to minimize route changes during the operational phase of flight, and to aid in the efficient orderly management of the air traffic, using federal airways. The preferred IFR routes which follow are designed to serve the needs of airspace users and to provide for a systematic flow of air traffic in the major terminal and en route flight environments. Cooperation by all pilots in filing preferred routes will result in fewer traffic delays and will better provide for efficient departure, en route and arrival air traffic service.

The following lists contain preferred IFR routes for the low altitude stratum and the high altitude stratum. The high altitude list is in two sections; the first section showing terminal to terminal routes and the second section showing single direction route segments. Also, on some high altitude routes low altitude airways are included as transition routes.

The following will explain the terms/abbreviations used in the listing:

1. Preferred routes beginning/ending with an airway number indicate that the airway essentially overlies the airport and flight are normally cleared directly on the airway.
2. Preferred IFR routes beginning/ending with a fix indicate that aircraft may be routed to/from these fixes via a Standard Instrument Departure (SID) route, radar vectors (RV), or a Standard Terminal Arrival Route (STAR).
3. Preferred IFR routes for major terminals selected are listed alphabetically under the name of the departure airport. Where several airports are in proximity they are listed under the principal airport and categorized as a metropolitan area; e.g., New York Metro Area.
4. Preferred IFR routes used in one direction only for selected segments, irrespective of point of departure or destination, are listed numerically showing the segment fixes and the direction and times effective.
5. Where more than one route is listed the routes have equal priority for use.
6. Official location identifiers are used in the route description for VOR/VORTAC navaids.
7. Intersection names are spelled out.
8. Navaid radial and distance fixes (e.g., ARD201113) have been used in the route description in an expediency and intersection names will be assigned as soon as routine processing can be accomplished. Navaid radial (no distance stated) may be used to describe a route to intercept a specified airway (e.g., MIV MIV101 V39); another navaid radial (e.g. UIM UIM255 GSW081); or an intersection (e.g., GSW081 FITCH).
9. Where two navaids, an intersection and a navaid, a navaid and a navaid radial and distance point, or any navigable combination of these route descriptions follow in succession, the route is direct.
10. The effective times for the routes are in UTC. During periods of daylight saving time effective times will be one hour earlier than indicated. All states observe daylight saving time except Arizona, Peurto Rico and the Virgin Islands. Pilots planning flight between the terminals or route segments listed should file for the appropriate preferred IFR route.
11. (90–170 incl) altitude flight level assignment in hundred of feet.
12. The notations pressurized and unpressurized for certain low altitude preferred routes to Kennedy Airport indicate the preferred route based on aircraft performance.
13. High Altitude Preferred IFR Routes are in effect during the following time periods unless otherwise noted.

Sun	1300–2259 local time.
Mon thru Fri	0701–2259 local time.
Sat	0701–1459 local time.

14. Use current SIDs and STARSs for flight planning.
15. For high altitude routes, the portion of the routes contained in brackets [] is suggested but optional. The portion of the route outside the brackets will likely be required by the facilities involved.

LOW ALTITUDE

Terminals	Route	Effective Times (UTC)
ALBANY (ALB)		
Boston (BOS)	(60–170 incl) V2 GDM GDM–STAR	1100–0300
Kennedy (JFK)	(60–170 incl, non-jet) V44 DPK	1100–0300
La Guardia (LGA)	(70–170 incl, less than 250 kts) V123 or (110–170 incl, 250 kts or more) IGN V157 HAARP	1100–0300
NE Philadelphia (PNE)	(90–170, non–turbojet) V14 CEDOR DNY051 DNY LHY LVZ V613 FJC V149 MAZIE ARD or (90–170, turbojet) V14 CEDOR DNY051 DNY LHY LVZ V29 ETX V30 V149 MAZIE ARD	1100–0300 1100–0300
Newark (EWR)	(70–170 incl, non–turbojet) V489 COATE or (110–170 incl, turbojet) V213 TALCO SHAFF–STAR	1100–0300 1100–0300
Philadelphia (PHL)	(60–170 incl less than 210 kts, non–turbojet) V14 CEDOR DNY051 DNY V449 LHY V93 LVZ V29 PTW or	1100–0300

Terminals	Route	Effective Times (UTC)
	(60–170 incl 210 kts plus, non–turbojet) V14 CEDOR DNY051 DNY V449 LHY V93 LVZ V613 FJC PTW	1100–0300
	or	
	(70–170 turbojets only) V14 CEDOR DNY051 DNY SLATT–STAR	
Trenton (TTN)	(90–170, non–turbojet) V14 CEDOR DNY051 DNY LHY LVZ V613 FJC V149 MAZIE ARD	1100–0300
	or	
	(90–170, turbojet) V14 CEDOR DNY051 DNY LHY LVZ V29 ETX V30 V149 MAZIE ARD	1100–0300
BALTIMORE (BWI)—See Washington/Baltimore Metro		
BOSTON METRO AREA (BOS)		
Cleveland (CLE)	(60–170) MHT V490 UCA V2 SYR V84 GEE V464 V115 TDT V72 V232 CXR	1000–0300
Kennedy (JFK)	(110–170, jets) LUCOS SEY067 SEY PARCH CCC ROBER	1100–0300
	or	
	(110–170, Props) LUCOS SEY067 SEY HTO V46 DPK	
	or	
	(AOB 100) BOSOX V419 V14 ORW V16 DPK	
La Guardia (LGA)	(110–170 incl, more than 250 kts) BOSOX BDL BDL255 VALRE V157 HAARP	1100–0300
	or	
	(110–170 incl, less than 250 kts) GLYDE BAF PWL V405 CASSH V123 HAARP	
Martha's Vineyard (MVY)	BOS V141 DRUNK	0000–2359
NE Philadelphia (PNE)	(60–100, non–turbojet, water) ARCER SEY V268 HTO V139 BRIGS ACY V184 OOD	1100–0300
	or	
	(90–170, non–turbojet) V292 SAGES V408 LHY LVZ V613 FJC V149 MAZIE ARD	1100–0300
	or	
	(110–170, water) BOS LUCOS SEY067 SEY HTO V139 MANTA V276 ARD	1100–0300
	or	
	(110–170, non–turbojet, water) BOS LUCOS SEY067 SEY HTO V139 BRIGS ACY V184 OOD	1100–0300
	or	
	(60–100, water) ARCER SEY V268 HTO V139 MANTA V276 ARD	1100–0300
	or	
	(110–170, jets) BOS LUCOS SEY067 SEY HTO V139 BRIGS CEDAR LAKE–STAR	1100–0300
Newark (EWR)	(110–170 incl, props) GLYDE BAF V292 SAGES V489 COATE	1100–0300
	or	
	(110–170, Jets) BOSOX BDL SHAFF–STAR	1100–0300
Philadelphia (PHL)	(80–170 incl) ARCER SEY V268 HTO V308 DRIFT V312 CYN	1100–0300
	or	
	(60–170, non–turbojet, >210 kts) V292 SAGES V408 LHY V93 LVZ V613 FJC PTW	1100–0300
Rochester (ROC)	(60–170 incl) MHT V490 UCA V2	1000–0300
Syracuse (SYR)	(60–170 incl) MHT V490 UCA V2	1000–0300
Trenton (TTN)	(60–100, water) ARCER SEY V268 HTO V139 MANTA V276 ARD	1100–0300
	or	
	(110–170, water) BOS LUCOS SEY067 SEY HTO V139 MANTA V276 ARD	1100–0300
	or	
	(90–170, non–turbojet) V292 SAGES V408 LHY LVZ V613 FJC V149 MAZIE ARD	1100–0300

Terminals	Route	Effective Times (UTC)
Washington Natl (DCA)	(80–170 incl) ARCER AVONN V268 HTO V308 OTT	1100–0300
Wilmington (ILG)	(60–100, non–turbojet, water) ARCER SEY V268 HTO V139 BRIGS ACY V184 OOD	1100–0300
	or	
	(110–170, non–turbojet, water) BOS LUCOS SEY067 SEY HTO V139 BRIGS ACY V184 OOD	1100–0300
	or	
	(110–170, turbojets) BOS LUCOS SEY067 SEY HTO V139 BRIGS CEDAR LAKE–STAR	1100–0300
BUFFALO (BUF)		
Boston (BOS)	(60–170 incl) V252 GEE V14 GDM GDM-STAR	1100–0300
Chicago Midway (MDW)	(60–170 incl) V84 LAN V218 ELX V55 GIJ V156 V92 CGT	1100–0300
Chicago O'Hare (ORD)	(60–170 incl) V84 PAPPI	1100–0300
Cleveland (CLE)	(60–170 incl) V115 JHW V270 ERI V14 JFN CXR	1100–0300
Detroit Metro Wayne Co (DTW)	(60–170 incl) V2 YQO SPICA–STAR	1100–0300
Detroit Satellites: Ann Arbor (ARB), Windsor (CYQG), Willow Run (YIP)	(60–170 incl) V2 YQO	1100–0300
Elmira (ELM)	(60–170 incl) V14 GEE V147	1100–0300
Philadelphia (PHL)	(60–170 incl) V33 V210 BUNTS	
Pittsburgh (PIT)	(60–170 incl) V115 TDT CIP GRACE–STAR	1100–0300
Washington Natl (DCA)	(60–170 incl) V33 BFD V170 V93 BAL	1100–0300
CAPE COD (CPD)		
Atlantic City (ACY)	(60–100 singles) V34 SEY V268 HTO CCC V16 DIXIE V229	1000–0300
	or	
	(AOB 100 all) V34 SEY V268 HTO V308 BRIGS	1000–0300
	or	
	(AOB 100 all) V146 BAF V292 SAGES V408 LHY V106 LVZ V29 MXE V184	1000–0300
Dover AFB (DOV)	(60 –100 singles) V34 SEY V268 HTO V46 DPK V16 ENO	1000–0300
	or	
	(AOB 100 all) V34 SEY V268 ENO	1000–0300
	or	
	(AOB 100 all) PVD V146 BAF V292 SAGES V408 LHY V106 LVZ V29 ENO	1000–0300
Dubois (DUJ)	(AOB 100 all) PVD V146 BAF V292 SAGES V408 LHY V58 FQM V226 PARDY	1000–0300
Gaithersburg (GAI)	(60–100 singles) V34 SEY V268 HTO V46 DPK V16 ENO V268 BAL	1000–0300
	or	
	(AOB 100 all) SEY HTO V268 EMI	1000–0300
	or	
	(AOB 100 all) PVD V146 BAF V292 SAGES V408 LHY V93 LRP V457 EMI	1000–0300
NE Philadelphia (PNE)	(60–100, single engine only) V34 SEY V268 HTO V46 DPK V16 CYN V312 OOD	1100–0300
	or	
	(60–100, non–turbojet, water) ARCER SEY V268 HTO V139 BRIGS ACY V184 OOD	1100–0300
	or	
	(110–170, non–turbojet) BOS LUCOS SEY067 SEY HTO V139 BRIGS ACY V184 OOD	1100–0300
	or	
	(110–170, jets) BOS LUCOS SEY067 SEY HTO V139 BRIGS CEDAR LAKE–STAR	1100–0300
	or	
	(60–100, water) ARCER SEY V268 HTO V139 MANTA V276 ARD	1100–0300
	or	
	(110–170, water) BOS LUCOS SEY067 SEY HTO V139 MANTA V276 ARD	1100–0300

Terminals	Route	Effective Times (UTC)
	or	
	(90–170, non–turbojet) V292 SAGES V408 LHY LVZ V613 FJC V149 MAZIE ARD	1100–0300
Newark (EWR)	(110–170, turbojet) BOSOX BDL SHAFF–STAR	1100–0300
Newburgh (SWF)	(AOB 100 all) PVD V405 BDL V205 TRESA	1000–0300
Trenton (TTN)	(60–100, water) ARCER SEY V268 HTO V139 MANTA V276 ARD	1100–0300
	or	
	(110–170, water) BOS LUCOS SEY067 SEY HTO V139 MANTA V276 ARD	1100–0300
	or	
	(90–170, non–turbojet) V292 SAGES V408 LHY LVZ V613 FJC V149 MAZIE ARD	1100–0300
White Plains (HPN)	(AOA 110, 250 kts or less) PVD V146 BAF V106 PWL V405 CASSH V123 HAARP	1100–0300
	or	
	(AOA 110, more than 250 kts) PVD PUT BDL IGN V157 HARRP	
Wilmington (ILG)	(60–100 single engine only) V34 SEY V268 HTO V46 DPK V16 CYN V312 OOD	1000–0300
	or	
	(60–100, non–turbojet, water) ARCER SEY V268 HTO V139 BRIGS ACY V184 OOD	1000–0300
	or	
	(AOB 100 all) PVD V146 BAF V292 SAGES V408 LHY V106 LVZ V29 DQO	1000–0300
	or	
	(110–170, non–turbojet, water) BOS LUCOS SEY067 SEY HTO V139 BRIGS ACY V184 OOD	1100–0300
	or	
	(110–170, jets) BOS LUCOS SEY067 SEY HTO V139 BRIGS CEDAR LAKE–STAR	1100–0300
CHARLESTON (CRW)		
Pittsburgh (PIT)	(60–170 incl) V115 JPU V117 WISKE WISKE–STAR	
KENNEDY (JFK)—See New York Metro Area		
LA GUARDIA (LGA)—See New York Metro Area		
MONTREAL (CYUL)		
Newark (EWR)	(80-170 incl, 250 kts or less) V282 SLK V203 ALB V489 COATE	1100-0300
	or	
	(110-170 incl, more than 250 kts) V282 SLK V203 ALB V213 SAX	1100-0300
NEW YORK METRO AREA		
From **KENNEDY (JFK)** only		
Albany (ALB)	(70–170 incl) BDR V487 CANAN V130	1100–0300
Baltimore (BWI)	(90–170 incl, 250 kts or less) WHITE V1 LEEAH V268	1100–0300
	or	
	(140–170 incl, more than 250 kts) RBV RBV274 MXE056 V378 BAL	1100–0300
Boston (BOS)	(110–170, turbojet) MERIT ORW PVD ORW–STAR	1100–0300
	or	
	(110–170, non–turbojet) MERIT ORW V16 WOONS	1100–0300
Burlington (BTV)	(90–170 incl) BDR V487	1100–0300
Hagerstown (HGR)	(140–160) RBV V276 V162 HAR V377	1100–0300
	or	
	(90–130 incl) COATE V188 LVZ V93 DUMMR V162 HAR V377	

Terminals	Route	Effective Times (UTC)
Harrisburg (MDT)	(90–130 incl) COATE V188 LVZ V93 DUMMR V162 HWANG	1100–0300
	or	
	(140–160 incl) RBV V276 V162 HWANG	1100–0300
	or	
	(90–130 incl) COATE V188 LVZ V93 DUMMR V162 HYPER V143 ROBRT AML	1100–0300
Montreal (CYUL)	(110–170) BDR V487 BTV V91 NAPEE	1100–0300
Norfolk (ORF)	(90–170 incl, more than 250 kts) WAVEY PLUME V139 CCV	1100–0300
	or	
	(90–170 incl, 250 kts or less) WHITE V1 CCV	1100–0300
Portland (PWM)	(110–170) MERIT HFD EEN CON CON061 NEETS	1100–0300
Providence (PVD)	(110–170 incl) BAYYS V229 SEALL V188 GON V374 MINNK	1100–0300
Rochester (ROC)	(90–130 incl) HAAYS HUO V252 GIBBE	1100–0300
	or	
	(140–170 incl) GAYEL V374 CFB V252 GIBBE	1100–0300
Rome (RME)	(90–170) HAAYS V273 V449 DNY V249 UCA	1100–0300
Syracuse (SYR)	(90–130 incl) HAAYS HUO V252 CFB V29	1100–0300
	or	
	(140–170 incl) GAYEL V374 CFB	1100–0300
Toronto (CYYZ)	(90–130 incl) COATE V126 LHY ULW V36	1100–0300
	or	
	(140–170 incl) GAYEL V374 CFB V270 ULW V36	1100–0300
Washington Dulles (IAD)	(140–170 incl, jets) RBV V276 V457 LRP V143 MULRR AML	1100–0300
	or	
	(140–170 incl, props) RBV V276 V39 LRP V143 MULRR AML	1100–0300
Washington Natl (DCA)	(80–170 incl, 250 kts or less) V1 LEEAH V229 V308 OTT	1100–0300
	or	
	(80–170 incl, more than 250 kts) WAVEY PLUME V308 BILIT	1100–0300
From LA GUARDIA (LGA) only		
Albany (ALB)	(70–170 incl) BDR V487 CANAN V130	1100–0300
Baltimore (BWI)	(90–170 incl) BIGGY V3 MXE V378 BAL	1100–0300
Binghamton (BGM)	(90–170 incl) HAAYS HUO V252 CFB	1100–0300
Boston (BOS)	(110–170 turbojet) MERIT ORW PVD ORW–STAR	1100–0300
	or	
	(110–170 non–turbojet) MERIT ORW V16 WOONS	1100–0300
Cleveland (CLE)	(90–100 incl) LANNA V30 SEG V6 YNG CXR	1100–0300
	or	
	(140–170 incl.) ELIOT V39 ETX V30 SEG V6 YNG CXR	1100–0300
Elmira (ELM)	(90–170 incl) COATE V126 LHY ULW	1100–0300
Harrisburg (CXY)	(90–100) LANNA V30 ETX V162 HWANG	1100–0300
	or	
	(110–170 incl) ELIOT V39 ETX V162 HWANG	1100–0300
Manchester (MHT)	MERIT HFD V229 GDM V106	1100–0300
Martha's Vineyard (MVY)	(110–170 incl) BAYYS V229 SEALL V188 GON V374	1100–0300
Montreal (CYUL)	(70–170 incl) BDR V91 BOWAN V487 BTV V91 NAPEE	1100–0300
Nantucket (ACK)	(110–170 incl) BAYYS V229 SEALL V188 GON V374 ORW130 DEEPO V46	1100–0300
Norfolk (ORF)	(90–170 incl) WHITE V1 CCV	
Pittsburgh (PIT)	(90–100 incl) LANNA V30 PSB GRACE–STAR	1100–0300
	or	
	(140–170 incl) ELIOT V39 ETX V30 PSB GRACE–STAR	1100–0300

Terminals	Route	Effective Times (UTC)
Portland (PWM)	(110–170 all) MERIT HFD EEN CON CON061 NEETS	1100–0300
Providence (PVD)	(110–170 incl) BAYYS V229 SEALL V188 GON V374 MINNK	1100–0300
Richmond (RIC)	(90–170 incl) WHITE V1 CCV HPW	1100–0300
Rochester (ROC)	(90–170 incl) HAAYS HUO V252 GIBBE	1100–0300
Rome (RME)	HAAYS V273 V449 DNY V249 UCA	1100–0300
Syracuse (SYR)	(90–170 incl, less than 250 kts) HAAYS HUO V252 CFB V29	1100–0300
	or	
	(90–170 incl, 250 kts plus) GAYEL CFB	1100–0300
Toronto (CYYZ)	(90–170 incl) COATE V126 LHY ULW V36	1100–0300
Washington Dulles (IAD)	(140–170 incl, jets) PARKE V457 LRP V143 MULRR AML	1100–0300
	or	
	(140–170 incl, props) ELIOT V39 LRP V143 MULRR AML	1100–0300
	or	
	(90–130 incl, props) LANNA V30 ETX V39 LRP V143 ROBRT AML	1100–0300
Washington Natl (DCA)	(90–170 incl , props) BIGGY V3 MXE V378 BAL	1100–0300
Wilkes-Barre/Scranton (AVP)	(90–170 incl) COATE V188 LVZ	1100–0300
From **NEWARK (EWR)** only		
Albany (ALB)	(70-170 incl, turbojets) BDR V487 CANAN V130	1100–0300
	or	
	(70-170 less than 210 kts) BREZY V39 SOARS V487 CANAN V130	1100–0300
	or	
	(70-170, greater than 210 kts) HAAYS V273 V449	1100–0300
Baltimore (BWI)	(90-170 incl) BIGGY V3 MXE V378	1100–0300
Bedford (BED)	(110-170 incl) MERIT HFD GRAYM–STAR	1100–0300
Binghamton (BGM)	(90-170 incl) HAAYS HUO V252 CFB	1100–0300
Boston (BOS)	(110-170, turbojet) MERIT ORW PVD ORW–STAR	1100–0300
	or	
	(110-170, non–turbojet) MERIT ORW V16 WOONS	1100–0300
Buffalo (BUF)	(90- 170 incl) COATE V126 LHY ULW ULW306 V164	1100–0300
Burlington (BTV)	(110-170 incl) GREKI V39 SOARS V487	1100–0300
Cleveland (CLE)	(90-100 incl) LANNA V30 SEG V6 YNG CXR	1100–0300
	or	
	(140-170 incl) ELIOT V39 ETX V30 SEG V6 YNG CXR	1100–0300
Elmira (ELM)	(90-170 incl) COATE V126 LHY ULW	1100–0300
Harrisburg (CXY)	(90-100 incl) LANNA V30 ETX V162 HWANG	1100–0300
	or	
	(110-170 incl) ELIOT V39 ETX V162 HWANG	1100–0300
Hyannis (HYA)	(110-170 incl) BAYYS V229 SEALL V188 GON V374 MVY	1100–0300
Manchester (MHT)	MERIT HFD V229 GDM V106	1100–0300
Martha's Vineyard (MVY)	(110-170 incl) BAYYS V229 SEALL V188 GON V374	1100–0300
Martinsburg (MRB)	(90-100) LANNA V30 ETX V39	1100–0300
	or	
	(110-170 incl) ELIOT V39	1100–0300
Martin State (MTN)	(90-170 incl) BIGGY V3 MXE V408 VINNY V93 SKILS	1100–0300
Montreal (CYUL)	(70-170 incl) BDR V91 BOWAN V487 BTV V91 NAPEE	1100–0300
Nantucket (ACK)	(110-170 incl) BAYYS V229 SEALL V188 GON V374 ORW130 DEEPO V46	1100–0300
Norfolk (ORF)	(90-170 incl) WHITE V1 CCV	1100–0300

Terminals	Route	Effective Times (UTC)
Norwood (OWD)	(110-170 incl) MERIT ORW V16 WOONS	1100–0300
Pittsburgh (PIT)	(90-100 incl) LANNA V30 PSB GRACE–STAR	1100–0300
	or	
	(140-170 incl.) ELIOT V39 ETX V30 PSB GRACE–STAR	1100–0300
Portland (PWM)	(110-170, all) MERIT HFD EEN CON CON061 NEETS	1100–0300
Providence (PVD)	(110-170 incl) BAYYS SEALL V188 GON V374 MINNK	1100–0300
Richmond (RIC)	(90-170 incl) WHITE V1 CCV HPW	1100–0300
Rochester (ROC)	(90-170 incl) HAAYS HUO V252 GIBBE	1100–0300
Rome (RME)	(90–170, all others) HAAYS V273 V449 DNY V249 UCA	1100–0300
Syracuse (SYR)	(90-170 incl, less than 250 Kts) HAAYS HUO V252 CFB V29	1100–0300
	or	
	(90-170 incl, 250 Kts plus) GAYEL CFB	1100–0300
Toronto (CYYZ)	(90-170 incl) COATE V126 LHY ULW V36	1100–0300
Washington Dulles (IAD)	(140-170 incl, jets) PARKE V457 LRP V143 MULRR AML	1100–0300
	or	
	(140-170 incl, props) ELIOT V39 LRP V143 MULRR AML	1100–0300
	or	
	(90-130 incl, props) LANNA V30 ETX V39 LRP V143 MULRR AML	1100–0300
Washington Natl (DCA)	(90–170 incl , props) BIGGY V3 MXE V378 BAL	1100–0300
Wilkes-Barre/Scranton (AVP)	(90–170 incl) COATE V188 LVZ	1100–0300
From **WHITE PLAINS (HPN)** only		
Albany (ALB)	(70–170 incl) BDR V487 CANAN V130	1100–0300
Baltimore (BWI)	(90–170 incl) BIGGY V3 MXE V378 BAL	1100–0300
Binghamton (BGM)	(90–170 incl) HAAYS HUO V252 CFB	1100–0300
Boston (BOS)	(110–170 turbojet) MERIT ORW PVD ORW–STAR	1100–0300
	or	
	(110–170 non–turbojet) MERIT ORW V16 WOONS	1100–0300
Cleveland (CLE)	(90–170 incl) COATE V126 LHY V58 PSB V6 YNG CXR	1100–0300
Elmira (ELM)	(90–170 incl) COATE V126 LHY ULW	1100–0300
Harrisburg (CXY)	(90–100) LANNA V30 ETX V162 HWANG	1100–0300
	or	
	(110–170 incl) ELIOT V39 ETX V162 HWANG	1100–0300
Manchester (MHT)	MERIT HFD V229 GDM V106	1100–0300
Martha's Vineyard (MVY)	(110–170 incl) BAYYS V229 SEALL V188 GON V374	1100–0300
Montreal (CYUL)	(70–170 incl) GREKI V39 SOARS V487 BTV V91 NAPEE	1100–0300
Nantucket (ACK)	(110–170 incl) BAYYS V229 SEALL V188 GON V374 ORW130 DEEPO V46	1100–0300
Norfolk (ORF)	(90–170 incl) WHITE V1 CCV	1100–0300
Norwood (OWD)	(110–170 incl) MERIT ORW V16 WOONS	1100–0300
Pittsburgh (PIT)	(90–170 incl) COATE V126 LHY V58 PSB GRACE–STAR	1100–0300
Portland (PWM)	(110–170, all) MERIT HFD EEN CON CON061 NEETS	1100–0300
Providence (PVD)	(110–170 incl) BAYYS V229 SEALL V188 GON V374 MINNK	1100–0300
Richmond (RIC)	(110–170 incl) WHITE V1 CCV HPW	1100–0300
Rochester (ROC)	(90–170 incl) HAAYS HUO V252 GIBBE	1100–0300
Syracuse (SYR)	(90–130 incl) HAAYS HUO V252 CFB V29	1100–0300
	or	
	(140–170 incl) HAAYS HUO V252 CFB	1100–0300
Toronto (CYYZ)	(90–170 incl) COATE V126 LHY ULW V36	1100–0300

Terminals	Route	Effective Times (UTC)
Washington Dulles (IAD)	(140–170 incl, jets) PARKE V457 LRP V143 MULRR AML	1100–0300
	or	
	(140–170 incl, props) ELIOT V39 LRP V143 MULRR AML	1100–0300
	or	
	(90–130 incl, props) LANNA V30 ETX V39 LRP V143 MULRR AML	1100–0300
Washington Natl (DCA)	(90–170 incl , props) BIGGY V3 MXE V378 BAL	1100–0300
Wilkes-Barre/Scranton (AVP)	(90–170 incl) COATE V188 LVZ	1100–0300
NORFOLK METRO AREA		
Baltimore (BWI)	HPW V213 PXT V93 GRACO	1100–0300
Kennedy (JFK)	(90–170 incl, 250 kts or less) SCHOL SBY200 V139 SIE V44 PANZE V184 ZIGGI	1100–0300
	or	
	(90–170 incl, more than 250 kts) SCHOL SBY200 V139 SIE CAMRN-STAR	1100–0300
La Guardia (LGA)	(90–170, non-jet) SCHOL SBY200 SBY V29 DQO V479 RUUTH V123 RENUE	1100–0300
	or	
	(90–170 incl, more than 250 kts, non-jet) SCHOL SBY200 SBY V29 V445 NANCI	1100–0300
Newark (EWR)	(110–170 incl, turbojets only) HPW V213 PXT DYLIN–STAR	1100–0300
	or	
	(non–jets, 180 kts or greater) HPW V213 PXT PXTØ23 GATBY V445 DQO V479 RUUTH V123 RBV RBV005 OWBIE	1100–0300
	or	
	(50–90 incl, non–jet, less than 180 kts) SCHOL SBY V29 MXE ARD V214 METRO	1100–0300
Philadelphia (PHL)	(70–170 incl) SCHOL SBY200 V139 SWL SWL034 RADDS VCN-STAR	1100–0300
Teterboro (TEB)	(advanced navigation, turbojets only) HPW V213 PXT JAIKE-STAR	1100–0300
	or	
	(turboprop) HPW V213 PXT PXT023 GATBY V445 DQO DQ0029 V3 SBJ TEB	1100–0400
	or	
	(piston) SCHOL SBY V29 MXE V3 SBJ TEB	1100–0400
Washington Dulles (IAD)	(Jet only) HPW RIC COATT-STAR	1100–0300
	or	
	(Non-Jet) HPW RIC RIC345 COATT V155 BRV BRV007 BARIN	1100–0300
Washington Natl (DCA)	HPW RIC IRONS-STAR	1100–0300
PHILADELPHIA METRO AREA		
Binghamton (BGM)	(90–170 incl) PTW PTW320 V499 CFB	1100–0300
Boston (BOS)	(90–170 incl) DITCH V312 DRIFT V308 ORW V16 WOONS	1100–0300
Buffalo (BUF)	(90–170 incl) PTW PTW320 V499 V164 FQM V31 ULW ULW306 V164	1100–0300
Cleveland (CLE)	(60–170 incl) MXE V474 IHD V119 GALLS V214 AIR V8 BSV KEATN–STAR	1100–0300
Detroit Metro-Wayne Co (DTW)	(60–170 incl) PTW PTW320 V276 RAV V170 ERI SPICA–STAR	1100–0300
Detroit Satellites: Coleman A Young (DET), Windsor (CYQG), Pontiac (PTK), Willow Run (YIP), Ann Arbor (ARB)	PTW PTW320 V276 RAV V170 ERI	
Elmira (ELM)	(90–170 incl) PTW PTW320 V499 V164 FQM V31 ULW	1100–0300
Kennedy (JFK)	(110–170, turbojets only) DITCH V312 V44 CAMRN	1100–0300
Norfolk (ORF)	(80–170 incl) OOD SBY V1 CCV	1100–0300
Richmond (RIC)	(80–170 incl) OOD OOD198 V229 PXT V16	1100–0300

Terminals	Route	Effective Times (UTC)
Syracuse (SYR)	(90–170 incl) PTW PTW320 V499 CFB V29	1100–0300
Toronto (CYYZ)	(90–170 incl) PTW PTW320 V499 V164 FQM V31 ULW V36	1100–0300
Washington Dulles (IAD)	(90–170 incl, turbojets only) MXE V474 V143 MULRR AML	1100–0300
Washington Natl (DCA)	(Turbojets only) MXE V378 BAL	1100–0300
White Plains (HPN)	(90–170 incl, props) DITCH V312 DRIFT V139 RICED RICED-STAR	1100–0300
Windsor Locks (BDL)	(90–170 incl) DITCH V312 DRIFT V139 MAD193 MAD MAD341 BRISS	
PITTSBURGH METRO AREA (PIT)		
Baltimore (BWI)	(90–170 incl) MGW V44 MRB V3 EMI	1100–0300
Boston (BOS)	(60–170) TON V35 ULW V72 ALB V2 GDM GDM–STAR	1100–0300
Buffalo (BUF)	(60–170 incl) EWC FKL DKK DKK020 WELLA	1100–0300
Chicago Midway (MDW)	(60–170 incl) BSV V8 FDY V422 CGT	1100–0300
Chicago O'Hare (ORD)	BSV V8 FDY V422 OXI V340 BEARZ	1100–0300
Cleveland (CLE)	(60–170 incl) BSV KEATN–STAR	1100–0300
Columbus (CMH/TZR)	(60–170 incl) TVT V43 APE	1100–0300
Detroit Metro–Wayne Co (DTW)	(60–170 incl) BSV DJB DJB314 GEMNI GEMNI–STAR	
Detroit Satellites: Ann Arbor (ARB), Willow Run (YIP)	(60–170 incl) EWC V37 ERI V221 V2	1100–0300
Coleman A Young (DET), Pontiac (PTK), Windsor (CYQG)	(60–170 incl) BSV V40 DJB LLEEO–STAR	1100–0300
Harrisburg (MDT)	(60–170 incl) REC V210 HAR	1100–0300
Indianapolis (IND)	(60–170 incl) TVT V210 MIE CLANG-STAR	1100–0300
Kennedy (JFK)	(90–170 incl) TON PSB V6 SBJ V232 COL	1100–0300
La Guardia (LGA)	TON PSB V6 LIZZI	
Newark (EWR)	(70–170 incl, 250 kts or less) TON V35 PSB V58 FQM PENNS–STAR	1100–0300
Philadelphia (PHL)	(60–170 incl) REC V210 BUNTS	1100–0300
Washington Natl (DCA)	(90–170 incl) MGW V144 ESL V4 AML	1100–0300
White Plains (HPN)	(60–170 incl, props) TON PSB V58 IGN NOBBI-STAR	1100–0300
PROVIDENCE (PVD)		
La Guardia (LGA)	(110–170 incl, more than 250 kts) PUT BDL BDL255 VALRE V157 HAARP or (110–170 incl, less than 250 kts) V146 BAF V106 PWL V405 CASSH V123 HAARP	1100–0300 1100–0300
Newark (EWR)	(110–170 incl, turbojets) PUT BDL SHAFF–STAR or (110–170 incl, non–turbojet) PUT V146 BAF V292 V489 COATE	1100–0300 1100–0300
ROCHESTER (ROC)		
Baltimore (BWI)	(90–170 incl) V147 ULW V31 HAR V265 EMI	1100–0300
Boston (BOS)	(60–170 incl) FAULT V31 BEEPS V14 GDM GDM-STAR	1100–0300
Detroit Metro Wayne Co (DTW)	(60–170 incl) V31 AIRCO BUF V2 YQO SPICA–STAR	1100–0300
Detroit Satellites: Coleman A Young (DET), Windsor (CYQG), Pontiac (PTK), Willow Run (YIP), Ann Arbor (ARB)	(60–170 incl) V31 AIRCO BUF V2 YQO	1100–0300
Kennedy (JFK)	(90–170 incl, props) V34 BEEPS RKA V433 PWL V44 DPK	1100–0300
Philadelphia (PHL)	(70–170 incl) V147 ULW V31 FQM MIP RAV V170 V210 BUNTS	
Washington Natl (DCA)	(90–170 incl, jet only) V147 ULW V35 PSB PSB149 SHILO V93 BAL or (90–170 incl, non-jet) V147 ULW V31 HAR V265 KRANT	1100–0300 1100–0300

Terminals	Route	Effective Times (UTC)
SYRACUSE (SYR)		
Boston (BOS)	(60–170 incl) V14 GDM GDM-STAR	1100–0300
Kennedy (JFK)	(70–170 incl, non-jet) V433 LOVES V44 DPK	1100–0300
Newark (EWR)	(110–170 incl, turbojets) V273 HNK SHAFF-STAR	1100–0300
	or	
	(70–170 incl, all other types) V273 HNK V167 WEARD V489 COATE	1100–0300
WASHINGTON/BALTIMORE METRO AREA		
From **BALTIMORE (BWI)** only		
Albany (ALB)	V93 LRP V499 CFB V270 DNY V449	1100–0400
Binghamton (BGM)	V93 LRP V499 CFB	1100–0300
Boston (BOS)	(90–170 incl props) PALEO-DP SIE V308 ORW V16 WOONS	1100–0300
Bridgeport (BDR)	(90–170 incl) PALEO-DP SIE V139 RICED MAD193 KEYED	1100–0300
Buffalo (BUF)	V93 SHILO PSB149 KOLBY V265 HAR V31 FQM V164	1100–0300
Charlottesville (CHO)	(below 110) V44 MRB V143 CEROL	1100–0300
	or	
	(110–170) FLUKY GVE	1100–0300
Cleveland (CLE)	MRB V501 THS V469 JST V297 TALLS V10 YNG CXR	1100–0300
Detroit Metro–Wayne Co (DTW)	(turbojets only) MRB V501 THS V469 JST EWC YNG V6 DJB GEMNI -STAR	
	or	
	(props only) MRB V501 THS V469 JST EWC YNG V6 DJB SKY SKY292 YQG197 LYNTN	
Detroit Satellites:		
Ann Arbor (ARB), Willow Run (YIP), Coleman A Young (DET), Pontiac (PTK), Windsor (CYQG)	MRB V501 THS V469 JST EWC ERI	
	MRB V501 THS V469 JST EWC YNG V6 V297 LLEEO LLEEO-STAR	
Greensboro (GSO)	(70–170 incl, non–jet) V44 MRB V143 LYH V222 HENBY	0000–2359
Hartford (HFD)	(90–170 incl) PALEO-DP V308 GON V58	1100–0300
Islip (ISP)	(90–170 incl) PALEO-DP SIE V139 SARDI CCC	1100–0300
Kennedy (JFK)	(90–170 incl, 250 kts or greater) PALEO-DP ACY V229 PANZE V44 CAMRN	1100–0300
	or	
	(90–170 incl, less than 250 kts) PALEO-DP ACY V184 ZIGGI	1100–0300
Knoxville (TYS)	V44 MRB V143 MOL ROA V16	1100–0300
La Guardia (LGA)	(Turbojets only) PALEO–DP V44 AGARD KORRY–STAR	1100–0400
	or	
	(Non-turbojets) SWANN-DP DQO V479 RUUTH V123 RENUE	1100–0300
Nantucket (ACK)	(90–170 incl) POLLA V312 PALEO V44 SIE V139 HTO V46	1100–0300
	or	
	(70) POLLA V312 GOLDA V268 ENO V16 JFK V229 BDR V475 V188 GON V374 MVY	1100–0300
Newark (EWR)	(110–170 incl, turbojets only) SWANN–DP V445 DQO DYLIN–STAR	1100–0300
	or	
	(110–170 incl, non-turbojet, greater than 180 kts) SWANN-DP V445 DQO V479 RUUTH V123 RBV RBV005 OWBIE	1100–0300
Newburgh (SWF)	V93 LHY V408 FILPS V483	1100–0300
New Haven (HVN)	(90–170 incl) PALEO-DP SIE V139 RICED MAD193 KEYED	1100–0300
Norfolk (ORF)	(70–170 incl, non jet) V93 PXT V16 COLIN V33 V286 STEIN	1100–0300
	or	

Terminals	Route	Effective Times (UTC)
	(70–170 jets) DAILY V33 V286 STEIN	1100–0300
Philadelphia (PHL)	(70–170 incl) SWANN-DP DQO	1100–0300
Pittsburgh (PIT)	(90–170 incl) MRB IHD NESTO–STAR	1100–0300
Poughkeepsie (POU)	V93 IGN	1100–0300
Rochester (ROC)	V93 SHILO PSB149 KOLBY V265 HAR V31 GIBBE	1100–0300
Syracuse (SYR)	(non-jet) V93 SHILO PSB149 KOLBY V265 HAR V31 FQM V423 CFB V29	1100–0300
Teterboro (TEB)	(Jets, Advanced Nav Only) SWANN JAIKE–STAR or (non–jets, 180 kts or greater) SWANN V445 DQO DQO029 V3 SBJ TEB	1100–0300 1100–0300
White Plains (HPN)	(110–170 incl) PALEO-DP SIE V139 RICED-STAR or (70) V93 LRP ETX FJC BWZ SAX V39 BREZY	1100–0300 1100–0300
From **WASHINGTON DULLES INTL (IAD)** only		
Bridgeport (BDR)	(90–170 incl) WOOLY V214 BAL V44 SIE V139 RICED MAD193 KEYED	1100–0300
Buffalo (BUF)	(70–170 incl, non–jet) MRB HGR V501 THS TON ELZ V164	0000–2359
Detroit Metro–Wayne Co (DTW)	(Turbojets only) MRB V501 THS V469 JST EWC YNG V6 DJB GEMNI -STAR or (Non-turbojet) MRB V501 THS V469 JST EWC YNG V6 DJB SKY SKY292 YQG197 LYNTN	
Detroit Satellites:		
Ann Arbor (ARB), Willow Run (YIP)	MRB V501 THS V469 JST EWC ERI	
Coleman A Young (DET), Pontiac (PTK), Windsor (CYQG)	MRB V501 THS V469 JST EWC YNG V6 V297 LLEEO LLEEO–STAR	
Greensboro (GSO)	(70–170 incl, non–jet) CSN V140 MOL V143 LYH V222 HENBY	0000–2359
Islip (ISP)	(90–170 incl) WOOLY V214 BAL V44 SIE V139 SARDI CCC	1100–0300
Kennedy (JFK)	(90–170 incl, 250 Kts or greater) PALEO V44 DONIL V229 PANZE V44 CAMRN or (90–170 incl, less than 250 Kts) WOOLY V44 DONIL V229 ACY V184 ZIGGI	1100–0300 1100–0300
La Guardia (LGA)	(110–170 incl, turbojets only) PALEO V44 AGARD KORRY–STAR or (90–170 incl, non turbojets) WOOLY V214 DQO V479 V123 RENUE	1100–0300 1100–0300
Newark (EWR)	(110–170 incl, turbojets only) AML SWANN V445 DQO DYLIN–STAR or (110–170 incl, non–turbojet, more than 180 kts) WOOLY V214 SWANN RUUTH–STAR	1100–0300 1100–0300
Newburgh (SWF)	MRB V501 HGR V377 AML009 SEG230 SEG V106 LHY V408 V483 FILPS	1100–0300
New Haven (HVN)	(90–170 incl) WOOLY V214 BAL V44 SIE V139 RICED MAD193 KEYED	1100–0300
Philadelphia (PHL)	(70–170 incl) WOOLY V214 DQO	1100–0300
Pittsburgh (PIT)	(60–170) MRB V214 GRV IHD NESTO–STAR	1100–0300
Raleigh-Durham (RDU)	FLUKY GVE SBV-STAR	1100–0300
Rochester (ROC)	MRB V501 HGR V377 AML009 SEG230 SEG V31 GIBBE	1100–0300
Syracuse (SYR)	(non-jet) MRB V501 HGR V377 AML009 SEG230 SEG V31 FQM V423 CFB V29 or (jet) MRB V501 HGR V377 AML009 SEG230 SEG V31 FQM V423 CFB	1100–0300 1100–0300
Teterboro (TEB)	(Jets, Advanced Nav Only) SWANN FUBRR JAIKE (RNAV)–STAR or	1100–0300

Terminals	Route	Effective Times (UTC)
	(non–jet, 180 kts or greater) SWANN V445 DQO DQO0029 V3 SBJ TEB	1100–0300
White Plains (HPN)	(90–170 incl) WOOLY V44 SIE V139 RICED RICED-STAR	1100–0300
	or	
	(70) MRB V501 HGR V377 HAR V162 ETX FJC BWZ SAX V39 BREZY	1100–0300
From **WASHINGTON NATIONAL (DCA)** only		
Albany (ALB)	KRANT V265 EMI V457 LRP V499 CFB V270 DNY V449	1100–0300
Allentown (ABE)	KRANT V265 EMI V457 LRP V39 ETX FJC	1100–0300
Altoona (AOO)	KRANT V265 V214 MRB JST AOO	1100–0300
Atlantic City (ACY)	(90–170) PALEO V44 SIE	
	or	
	(70) POLLA V312 GOLDA V268 LEEAH	1100–0300
Barnes (Westfield) (BAF)	(90–170) POLLA V312 PALEO V44 SIE V139 RICED MAD193 MAD MAD341 BRISS	1100–0300
	or	
	(70) PALEO V312 GOLDA V268 ENO V16 JFK V229 BDR BDR014 JUDDS BAF	
Bedford (BED)	POLLA V312 PALEO V44 SIE V308 ORW GRAYM–STAR	1100–0300
	or	
	(70) PALEO V312 GOLDA V268 ENO V16 JFK V229 HFD HFD053 DREEM	1100–0300
Binghamton (BGM)	KRANT V265 EMI V457 LRP V499 CFB	1100–0300
Boston (BOS)	(90–170 incl) POLLA V312 PALEO V44 SIE V308 ORW V16 WOONS	1100–0300
	or	
	(70) PALEO V312 GOLDA V268 ENO V16 JFK V229 HFD V3 WOONS	1100–0300
Bridgeport (BDR)	KRANT V265 EMI V457 LRP V93 LHY V106 PWL V44 DENNA	1100–0300
	or	
	(90–170) POLLA V312 PALEO V44 SIE V139 RICED MAD193 KEYED	1100–0300
	or	
	(70) PALEO V312 GOLDA V268 ENO V16 JFK V229 BDR	1100–0300
Buffalo (BUF)	EMI V265 HAR V31 FQM V164	1100–0300
Burlington (BTV)	KRANT V265 EMI V457 LRP V93 LHY V449 ALB	1100–0300
Butler (BTP)	KRANT V265 EMI V268 NESTO	1100–0300
Charleston (CRW)	LDN LDN275 V286 EKN V4 HVQ	1100–0300
Clarksburg (CKB)	LDN LDN275 V286 EKN CKB	1100–0300
Cleveland (CLE)	KRANT V265 V214 MRB V501 THS V469 JST V297 TALLS V10 YNG CXR	1100–0300
Concord (CON)	(90–170) POLLA V312 PALEO V44 SIE V139 HTO V308 ORW V14 GDM V39	1100–0300
Detroit Metro–Wayne Co (DTW)	(Turbojet only) KRANT V265 V214 MRB V501 THS V469 JST EWC YNG V6 DJB GEMNI-STAR	
	or	
	(Non-turbojet only) KRANT V265 V214 MRB V501 THS V469 JST EWC YNG V6 DJB SKY SKY292 YQG197 LYNTN	1100–0200

Terminals	Route	Effective Times (UTC)
Detroit Satellites:		
Ann Arbor (ARB), Willow Run (YIP)	KRANT V265 V214 MRB V501 THS V469 JST EWC ERI	
Coleman A Young (DET), Pontiac (PTK), Windsor (CYQG)	KRANT V265 V214 MRB V501 THS V469 JST EWC YNG V6 V297 LLEEO LLEEO–STAR	
Dover (AFB (DOV)	(70) PALEO V312 GOLDA V268 ENO DOV	
Erie (ERI)	KRANT V265 V214 MRB JST CIP V276	1100–0300
Farmingdale (FRG)	(90–170) PALEO V44 DONIL V229 PANZE V44 CAMRN or (70) POLLA V312 GOLDA V268 ENO V16 JFK or (90–170 , less than 250 kts) PALEO V44 DONIL V229 ACY V184 ZIGGI FRG	 1100–0300
Greensboro (GSO)	(70–170 incl, non–jet) CSN V140 MOL V143 LYH V222 HENBY	0000–2359
Groton (GON)	(90–170) POLLA V312 PALEO V44 SIE V139 HTO HT0034 MONDI or (70) POLLA V312 GOLDA V268 ENO V16 JFK V229 BDR MAD MAD126 MONDI	1100–0300
Hagerstown (HGR)	V265 EMI EMI325 HGR089	1100–0300
Harrisburg (MDT/CXY)	KRANT V265 EMI V265	1100–0300
Hartford (HFD)	(90–170) POLLA V312 PALEO V44 SIE V139 RICED MAD193 MAD V1 or (70) POLLA V312 GOLDA V268 ENO V16 JFK	1100–0300
Islip (ISP)	(90–170) POLLA V312 PALEO V44 SIE V139 SARDI CCC or (70) POLLA V312 GOLDA V268 ENO V16 JFK	1100–0300 1100–0300
Kennedy (JFK)	(90–170 incl, 250 kts or greater) POLLA V312 PALEO V44 DONIL V229 PANZE V44 CAMRN or (90–170 incl, less than 250 kts) POLLA V312 PALEO V44 DONIL V229 V184 ZIGGI	1100–0300 1100–0300
La Guardia (LGA)	PALEO V44 AGARD KORRY–STAR	1100–0300
Martha's Vineyard (MVY)	(90–170) POLLA V312 PALEO V44 SIE V139 HTO V46 FLAPE or (70) POLLA V312 GOLDA V268 ENO V16 JFK V229 BDR MAD V475 V188 GON V374	1100–0300 1100–0300
Morgantown (MGW)	LDN V144	1100–0300
Nantucket (ACK)	(90–170) POLLA V312 PALEO V44 SIE V139 HTO V46 or (70) POLLA V312 GOLDA V268 ENO V16 JFK V229 BDR V475 MAD V475 V188 GON V374 MVY	1100–0300 1100–0300
Newark (EWR)	(advanced navigation, turbojets only) SWANN V445 DQO DYLIN–STAR or (piston) SWANN V445 DQO V29 MXE ARD V214 METRO or (turboprops) SWANN V445 DQO V479 RUUTH V123 RBV RBV005 OWBIE	1100–0300 1100–0300 1100–0300
Newburgh (SWF)	KRANT V265 EMI V457 LRP V93 LHY V408 V483 FILPS	1100–0300
New Haven (HVN)	(90–170) POLLA V312 PALEO V44 SIE V139 RICED MAD193 KEYED or (70) POLLA V312 GOLDA V268 ENO V16 JFK V229 BDR	1100–0300 1100–0300
Norfolk (ORF)	DAILY V33 V286 STEIN	1100–0300

Terminals	Route	Effective Times (UTC)
Philadelphia (PHL)	(110 , jets) MITCH V445 DQO	1100–0300
	or	
	(Props to PHL and Satellites) PALEO V170 DQO	1100–0300
Pittsburgh (PIT)	KRANT V265 V214 MRB V214 GRV IHD NESTO–STAR	1100–0300
Portland (PWM)	(90–170) POLLA V312 PALEO V44 SIE V139 HTO ORW GDM CON CON061 NEETS	1100–0300
	or	
	(70) POLLA V312 GOLDA V268 ENO V16 JFK V229 BDR MAD V1 HFD V229 GDM V106 ENE	1100–0300
Poughkeepsie (POU)	KRANT V265 EMI V457 LRP V93 LHY V408 483 FILPS	1100–0300
Providence (PVD)	(90–170) POLLA V312 PALEO V44 SIE V139 HTO HTO070 PVD195	1100–0300
	or	
	(90–170 advanced RNAV only) POLLA V312 PALEO V44 SIE V139 HTO JORDAN (RNAV)–STAR	1100–0300
Rochester (ROC)	KRANT V265 EMI V265 HAR V31 GIBBE	1100–0300
Rome (RME)	KRANT V265 EMI V457 LRP V499 CFB UCA	1100–0300
Syracuse (SYR)	KRANT V265 HAR V31 FQM V423 CFB V29	1100–0300
Teterboro (TEB)	(advanced navigation, turbojets only) SWANN JAIKE–STAR	1100–0400
	or	
	(turboprop) SWANN V445 DQO DQO029 V3 SBJ	1100–0400
White Plains (HPN)	(70) KRANT V265 EMI LRP ETX FJC BWZ SAX V39 BREZY	
	or	
	(90–170) PALEO V44 SIE V139 RICED RICED-STAR	1100–0300
	or	
	(70, less than 180 kts) POLLA V170 ODESA MXE ARD V214 METRO V249 SAX V39 BREZY	1100–0300
Wilkes Barre/Scranton (AVP)	KRANT V265 EMI V457 LRP V93 LVZ	1100–0300
Windsor Locks (BDL)	(210 kts or less) KRANT V265 EMI V457 V93 LHY V106 PWL V34 MOONI V58 JUDDS	1100–0300
	or	
	(90–170) POLLA V312 PALEO V44 SIE V139 HTO V308 ORW V130	
	or	
	(70) POLLA V312 GOLDA V268 ENO V16 JFK V229 BDR BDR014 JUDDS V419 BRISS BDL	1100–0300
WINDSOR LOCKS (BDL)		
Islip (ISP)	(110–170 incl) HFD V58 GON V308 BOROS CCC	1000–0300
NE Philadelphia (PNE)	(110–170, non–turbojet) HFD V58 THUMB HTO V139 BRIGS CEDAR LAKE–STAR	1100–0300
	or	
	(110–170, water) BOS LUCOS SEY067 SEY HTO V139 MANTA V276 ARD	1100–0300
	or	
	(90–170, non–turbojet) V292 SAGES V408 LHY LVZ V613 FJC V149 MAZIE ARD	1100–0300
	or	
	(90–170, jets) V292 SAGES V408 LHY LVZ V29 ETX V30 V149 MAZIE ARD	1100–0300
Newark (EWR)	(70–170 incl, 250 kts or less) SASHA V292 V489 COATE	1100–0300
	or	
	(110–170 incl, more than 250 kts) SASHA V292 V312 SAX	1100–0300
Philadelphia (PHL)	(110–170 incl, non–turbojet) HFD V58 THUMB HTO V139 BRIGS ACY V184 OOD	1100–0300
	or	

Terminals	Route	Effective Times (UTC)
	(60–170 incl, props less than 210 kts) SASHA V292 SAGES V408 LHY LVZ V29 SLATT V6 FJC V149 MAZIE	1100–0300
	or	
	(60–170 incl, props 210 kts plus) SASHA V292 SAGES V408 LHY LVZ V29 SLATT V6 FJC V149 MAZIE	1100–0300
	or	
	(60–170 incl, turbojets) SASHA V292 SAGES V408 LHY LVZ V147 MAZIE	1100–0300
Trenton (TTN)	(110–170, water) BOS LUCOS SEY067 SEY HTO V139 MANTA V276 ARD	1100–0300
	or	
	(90–170, non–turbojet) V292 SAGES V408 LHY LVS V613 FJC V149 MAZIE ARD	1100–0300
	or	
	(90–170, jets) V292 SAGES V408 LHY LVS V29 ETX V30 V149 MAZIE ARD	1100–0300
Wilmington (ILG)	(110–170, non–turbojet) HFD V58 THUMB HTO V139 BRIGS ACY V184 OOD	1100–0300
	or	
	(110–170, non–turbojet) HFD V58 THUMB HTO V139 BRIGS CEDAR LAKE–STAR	1100–0300

SPECIAL LOW ALTITUDE DIRECTIONAL ROUTES

	Route	Effective Times (UTC)
Low Altitude IFR bi-directional routes for traffic overflying New York Metro Area:		
East of New York Metro Area—V139		1100–0300
West of New York Metro Area—V93		1100–0300
Low Altitude IFR bi-directional routes for traffic overflying Washington Metro Area:		
	HAR V377 MOL	1100–0300
	HAR V377 V38 GVE	1100–0300
	LRP V93 PXT	1100–0300
Low Altitude IFR single direction route:		
Southbound	MXE V474 V377 HGR	1100–0300
Low Altitude IFR traffic overflying Washington Metro Area from over ENO landing Charlottesville, VA or Shenandoah, VA:		
	ENO V213 GVE098 GVE thence direct CHO or SHD	1200–0200

HIGH ALTITUDE

Terminals	Route	Effective Times (UTC)
ALBANY (ALB)		
Chicago O'Hare (ORD)	SYR J63 EHMAN YXU J547 FNT PAITN–STAR	1100–0300
Cincinnati (CVG)	(RNAV only) SYR JOSSY MAULL KODIE CTW TIGRR (RNAV)–STAR	
	or	
	(all others) SYR J29 KELIE SLT016 SLT SLT249 KODIE CTW081 CTW CINCE–STAR	
Washington Dulles (IAD)	(Turbojets) J6 LRP DELRO–STAR	1100–0300
	or	
	(Turboprops) DNY LHY V106 SEG SEG–STAR	1100–0300
ALLENTOWN (ABE)		
Cincinnati (CVG)	(RNAV only) ETX SEG PSB MAULL KODIE CTW TIGRR (RNAV)–STAR	
	or	
	(all others) ETX SEG PSB PSB281 MAULL SLT249 KODIE CTW081 CTW CINCE–STAR	

Terminals	Route	Effective Times (UTC)
Detroit Metro–Wayne Co (DTW)	ETX J80 J518 DJB GEMNI–STAR	
ATLANTIC CITY (ACY)		
Detroit Metro–Wayne Co (DTW)	V229 LEEAH V268 ENO V29 DQO PENSY J110 LEJOY J518 DJB GEMNI–STAR	
BALTIMORE (BWI) —See Washington/Baltimore Metro		
BANGOR (BGR)		
Cincinnati (CVG)	(RNAV only) SYR JOSSY MAULL KODIE CTW TIGRR (RNAV)–STAR or (all others) SYR J29 KELIE SLT016 SLT SLT249 KODIE CTW081 CTW CINCE–STAR	
BINGHAMTON (BGM)		
Cincinnati (CVG)	(RNAV only) CFB FQM PSB MAULL KODIE CTW TIGRR (RNAV)–STAR or (all others) CFB FQM PSB PSB281 MAULL SLT249 KODIE CTW081 CTW CINCE–STAR	
BOSTON (BOS)		
Atlanta (ATL)	GLYDE BAF J77 PTW J48 ODF WHINZ–STAR or (RNAV only) GLYDE BAF J77 PTW J48 ODF FLCON (RNAV)–STAR	1100–0300 1100–0300
Baltimore (BWI)	NELIE CMK J75 MXE V378 BAL	1100–0300
Boca Raton (BCT)	(Turbojets–GPS or DME/DME–IRU equipped) LUCOS SEY067 SEY HTO J174 ORF ISO J121 CHS J79 OMN CAYSL (RNAV)–STAR or (Water–Turbojets–GPS or DME/DME–IRU equipped) LUCOS SEY067 SEY HTO J174 SWL CEBEE WETRO DIW AR19 AYBID CAYSL (RNAV)–STAR or (Turbojets) LUCOS SEY067 SEY HTO J174 ORF ISO J121 CHS J79 OMN TUXXI–STAR or (Water–Turbojets) LUCOS SEY067 SEY HTO J174 SWL CEBEE WETRO DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CAYSL	
Charlotte (CLT)	BOS NELIE CMK J75 GVE LYH SUDSY (RNAV)–STAR	1100–0300
Chicago O'Hare (ORD)	MHT CAM SYR J63 EHMAN YXU J547 FNT PAITN–STAR	1100–0300
Cincinnati (CVG)	(RNAV only) GLYDE CTR HNK J49 PSB MAULL KODIE CTW TIGRR (RNAV)–STAR or (all others) GLYDE CTR HNK J49 PSB PSB281 MAULL SLT249 KODIE CTW081 CTW CINCE–STAR	
Cleveland (CLE)	MHT CAM J547 SYR J29 KELIE BDF CXF	1100–0300
Dallas/Ft. Worth (DFW)	GLYDE BAF J77 SAX J6 LIT BYP	1100–0300
Dayton (DAY)	GLYDE BAF J77 SAX J80 AIR APE DANEI–STAR	1100–0300
Denver (DEN)	MHT CAM SYR J547 BUF J94 ONL J114 SNY LANDR–STAR	1100–0300
Detroit Metro-Wayne Co. (DTW)	MHT CAM J547 BUF BUF267 YQO094 YQO SPICA–STAR	1100–0300
Detroit Satellites: Coleman A Young (DET), Windsor (CYQG), Pontiac (PTK), Willow Run (YIP), Ann Arbor (ARB)	MHT CAM J547 BUF YQO or SYR J547 YXU GOHMA–STAR or SYR J547 YXU SWWAN–STAR	1100–0300 1100–0300 1100–0300

Terminals	Route	Effective Times (UTC)
Fort Lauderdale (FLL)	(Turbojets–GPS or DME/DME–IRU equipped) LUCOS SEY067 SEY HTO J174 ORF ISO J121 CHS J79 OMN FISEL (RNAV)–STAR	
	or	
	(Water–Turbojets–GPS or DME/DME–IRU equipped) LUCOS SEY067 SEY HTO J174 SWL CEBEE WETRO ILM AR21 CRANS FISEL (RNAV)–STAR	
	or	
	(Turbojets) LUCOS SEY067 SEY HTO J174 ORF ISO J121 CHS J79 OMN GISSH–STAR	
	or	
	(Water–Turbojets) LUCOS SEY067 SEY HTO J174 SWL CEBEE WETRO ILM AR21 CRANS HIILL FATHR GISSH–STAR	
	or	
	(Water–Turboprops–GPS or DME/DME–IRU equipped) LUCOS SEY067 SEY HTO J174 ILM AR21 CRANS FISEL (RNAV)–STAR	
	or	
	(Turboprops) LUCOS SEY067 SEY HTO J174 ORF J121 CHS J79 OMN MLB BLUFI–STAR	
	or	
	(Water–Turboprops) LUCOS SEY067 SEY HTO J174 ILM AR21 CRANS HIILL FATHR GISSH–STAR	
Fort Myers (RSW)	(WATER–Turbojets–GPS or DME/DME–IRU equipped) LUCOS SEY067 SEY HTO J174 SWL CEBEE WETRO DIW ILM AR15 HIBAC SHFTY (RNAV)–STAR	1100–0300
Greensboro (GSO)	NELIE CMK J75 GVE LYH V222 HENBY	0000–2359
Houston George Bush Intctl (IAH)	(Turbojets–GPS or DME/DME–IRU equipped) GLYDE BAF J77 PTW J48 MOL J22 VUZ AEX TXMEX (RNAV)–STAR	1100–0300
	or	
	(non–advanced NAV only) GLYDE BAF J77 PTW J48 MOL J22 VUZ AEX DAS–STAR	1100–0300
Houston Hobby (HOU)	(GPS or DME/DME–IRU equipped) GLYDE BAF J77 PTW J48 MOL J22 VUZ AEX ROKIT–STAR	1100–0300
	or	
	(non–advanced NAV only) GLYDE BAF J77 PTW J48 MOL J22 VUZ AEX DAS–STAR	1100–0300
Indianapolis (IND)	GLYDE BAF J77 SAX J80 EMPTY DQN CLANG-STAR	1100–0300
Islip (ISP)	LUCOS SEY067 SEY V268 HTO V46 CCC	1100–0300
Kennedy (JFK)	LUCOS SEY067 SEY PARCH CCC ROBER	1100–0300
Los Angeles (LAX)	MHT CAM SYR J547 BUF J16 BAE DBQ J94 ONL J114 DVV J60 HEC DOWNE-STAR	1100–0300
	or	
	MHT CAM SYR J547 BUF J94 ECK J38 GRB ODI FSD J114 DVV J60 HEC RIIVR-STAR	1100–0300
Memphis (MEM)	GLYDE BAF J77 SAX J6 BWG WLDER-STAR	1100–0300
Miami (MIA)	(Turbojets–GPS or DME/DME–IRU equipped) LUCOS SEY067 SEY HTO J174 ORF ISO J121 CHS J79 OMN HILEY (RNAV)–STAR	
	or	
	(Water–Turbojets–GPS or DME/DME–IRU equipped) LUCOS SEY067 SEY HTO J174 SWL CEBEE WETRO DIW AR22 JORAY HILEY (RNAV)–STAR	
	or	
	(Turbojets) LUCOS SEY067 SEY HTO J174 ORF ISO J121 CHS J79 OMN ANNEY–STAR	
	or	

Terminals	Route	Effective Times (UTC)
	(Water–Turbojets) LUCOS SEY067 SEY HTO J174 SWL CEBEE WETRO DIW AR22 JORAY OSOGY ENVOY YOSSI MILSY BOYUR HILEY KAINS	
	or	
	(Turboprops) LUCOS SEY067 SEY HTO J174 ORF J121 CHS J79 OMN ANNEY–STAR	
Milwaukee (MKE)	MHT CAM SYR J547 BUF J94 ECK MKG V2 SUDDS	1100–0300
Minneapolis/St Paul (MSP)	MHT CAM SYR J547 BUF YWT J63 TVC J522 GRB EAU-STAR	1100–0300
Nashville (BNA)	GLYDE BAF J77 SAX J6 YOCKY GUITR–STAR	1100–0300
Newark (EWR)	(More than 250 kts) GLYDE V292 V213 SAX	1100–0300
	or	
	(250 kts or less) GLYDE V292 V489 COATE	1100–0300
New Orleans (MSY)	GLYDE BAF J77 PTW J48 MOL J22 MEI J31	
Orlando Exec (ORL)	LUCOS SEY067 SEY HTO J174 ORF J121 CHS J79 OMN CORLL-STAR	1100–0300
	or	
	(GPS or DME/DME–IRU equipped) LUCOS SEY067 SEY HTO J174 SWL CEBEE WETRO ILM AR15 HIBAC CWRLD (RNAV)–STAR	1100–0400
Orlando Intl (MCO)	(Water–Turbojets) LUCOS SEY067 SEY HTO J174 SWL CEBEE WETRO ILM AR15 HIBAC APOLO ORL	1100–0300
	or	
	LUCOS SEY067 SEY HTO J174 ORF J121 CHS J79 OMN BITHO–STAR	1100–0300
	or	
	(GPS or DME/DME–IRU equipped) LUCOS SEY067 SEY HTO J174 SWL CEBEE WETRO ILM AR15 HIBAC CWRLD (RNAV)–STAR	1100–0400
	or	
	(GPS or DME/DME–IRU equipped) LUCOS SEY067 SEY HTO J174 ORF J121 CHS J79 OMN CWRLD (RNAV)–STAR	1100–0400
Philadelphia (PHL)	LUCOS SEY067 SEY HTO J121 BRIGS VCN–STAR	1100–0300
Pittsburgh (PIT)	GLYDE CTR HNK HNK271 J190 SLT GRACE–STAR	1100–0300
Raleigh–Durham (RDU)	LUCOS SEY067 SEY HTO J174 SWL ARGAL–STAR	1000–0300
Salt Lake City (SLC)	MHT CAM SYR J547 BUF J16 BAE DBQ J94 OCS LHO–STAR	
San Francisco (SFO)	MHT CAM J547 SYR J547 BUF J94 ECK J38 GRB J106 GEP J70 ABR J32 FMG ILA PYE PYE–STAR	1100–0300
St Louis (STL)	GLYDE BAF J77 SAX J80 AIR J110 VHP VLA-STAR	
Tampa (TPA)	NELIE CMK J75 TAY LZARD–STAR	
Washington Dulles (IAD)	GLYDE BAF J77 SAX J6 LRP V143 MULRR AML	1100–0300
Washington Natl (DCA)	LUCOS SEY067 SEY HTO J174 ATR085 ATR V308 BILIT	1100–0300
	or	
	(GPS or DME/DME–IRU equipped) LUCOS SEY067 SEY HTO J174 ATR085 ATR V308 LAFLN BILIT (RNAV)–STAR	1100–0300
West Palm Beach (PBI)	(Turbojets–GPS or DME/DME–IRU equipped) LUCOS SEY067 SEY HTO J174 ORF ISO J121 CHS J79 OMN FRWAY (RNAV)–STAR	1100–0300
	or	
	(Water–Turbojets–GPS or DME/DME–IRU equipped) LUCOS SEY067 SEY HTO J174 SWL CEBEE WETRO DIW AR19 AYBID FRWAY (RNAV)–STAR	1100–0300
	or	
	(Turbojets) LUCOS SEY067 SEY HTO J174 ORF ISO J121 CHS J79 OMN TUXXI–STAR	1100–0300
	or	

Terminals	Route	Effective Times (UTC)
	(Water–Turbojets) LUCOS SEY067 SEY HTO J174 SWL CEBEE WETRO DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CASKI	1100–0300
BRIDGEPORT (BDR)		
Baltimore (BWI)	BEADS V139 SARDI RBV J230 J75 MXE V378 BAL	
Binghamton (BGM)	(Turbojets) NEION J223 CORDS CFB	
Boca Raton (BCT)	(Turbojets–GPS or DME/DME IRU equipped) BEADS CCC148 J174 ORF ISO J121 CHS J79 OMN CAYSL (RNAV)–STAR or (Turbojets) BEADS CCC148 J174 ORF ISO J121 CHS J79 OMN TUXXI–STAR or (Water–Turbojets–GPS or DME/DME IRU equipped) BEADS CCC148 J174 SWL CEBEE WETRO DIW AR19 AYBID CAYSL (RNAV)–STAR or (Water–Turbojets) BEADS CCC148 J174 SWL CEBEE WETRO DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CAYSL	
Buffalo (BUF)	NEION J223 CORDS ULW ULW306 V164 or (Turboprops) GAYEL J95 CFB V270 ULW ULW306 V164	
Chicago O'Hare (ORD)	COATE J36 FNT PAITN-STAR	1100–0300
Dallas/Fort Worth (DFW)	BEADS V139 SARDI RBV J230 J6 LIT BYP	
Detroit Metro Wayne Co (DTW)	GAYEL J95 CFB CFB286 TRAAD ULW306 KOOPR YQO SPICA–STAR	1100–0300
Detroit Satellites: Coleman A Young (DET), Pontiac (PTK), Willow Run (YIP), Ann Arbor (ARB)	GAYEL J95 CFB CFB286 TRAAD ULW306 KOOPR YQO	
Windsor (CYQG)	GAYEL J95 CFB CFB286 TRAAD J132 ULW306 KOOPR YQO	
Fort Lauderdale (FLL)	(Turbojets) BEADS CCC148 J174 ORF ISO J121 CHS J79 OMN GISSH–STAR or (Turboprops) BEADS CCC148 J174 ORF J121 CHS J79 OMN MLB BLUFI–STAR or (Turbojets–GPS or DME/DME–IRU equipped) BEADS CCC148 J174 ORF ISO J121 CHS J79 OMN FISEL (RNAV)–STAR or (Water–Turbojets–GPS or DME/DME–IRU equipped) BEADS CCC148 J174 SWL CEBEE WETRO ILM AR21 CRANS FISEL (RNAV)–STAR or (Water–Turbojets) BEADS CCC148 J174 SWL CEBEE WETRO ILM AR21 CRANS HILL FATHR GISSH–STAR	
Ithaca (ITH)	(Turbojets) NEION J223 CORDS CFB V423	
Miami (MIA, TMB, HST)	(Turbojets–GPS or DME/DME–IRU equipped) BEADS CCC148 J174 ORF ISO J121 CHS J79 OMN HILEY (RNAV)–STAR or (Turboprops) BEADS CCC148 J174 ORF J121 CHS J79 OMN ANNEY–STAR or (Turbojets) BEADS CCC148 J174 ORF ISO J121 CHS J79 OMN ANNEY–STAR or	

Terminals	Route	Effective Times (UTC)
	(Water–Turbojets–GPS or DME/DME–IRU equipped) BEADS CCC148 J174 SWL CEBEE WETRO DIW AR22 JORAY HILEY (RNAV)–STAR	
	or	
	(Water–Turbojets) BEADS CCC148 J174 SWL CEBEE WETRO DIW AR22 JORAY OSOGY ENVOY YOSSI MILSY BOYUR HILEY KAINS	
Montreal (CYUL)	SOARS V419 JUDDS CAM J222 PLB V91 NAPEE	
Orlando Executive (ORL)	BEADS CCC148 J174 ORF J121 CHS J79 OMN CORLL-STAR	1100–0300
	or	
	(GPS or DME/DME–IRU equipped) BEADS CCC148 J174 SWL CEBEE WETRO ILM AR15 HIBAC CWRLD (RNAV)–STAR	1100–0400
Orlando Intl (MCO)	BEADS CCC148 J174 ORF J121 CHS J79 OMN BITHO–STAR	1100–0300
	or	
	(Water–Turbojets) BEADS CCC148 J174 SWL CEBEE WETRO ILM AR15 HIBAC APOLO ORL	1100–0300
	or	
	(GPS or DME/DME–IRU equipped) BEADS CCC148 J174 ORF J121 CHS J79 OMN CWRLD (RNAV)–STAR	1100–0400
	or	
	(GPS or DME/DME–IRU equipped) BEADS CCC148 J174 SWL CEBEE WETRO ILM AR15 HIBAC CWRLD (RNAV)–STAR	1100–0400
Pittsburgh (PIT)	(Turbojets) COATE J36 J190 SLT GRACE–STAR	
	or	
	(Turboprops) GAYEL V374 V58 LHY J36 J217 ETG V226 CIP GRACE–STAR	
Raleigh/Durham (RDU)	BEADS CCC148 J174 SWL ARGAL-STAR	
Richmond (RIC)	BEADS CCC148 J174 SWL V139 CCV HPW	1100–0200
Rochester (ROC)	(Turbojets) NEION J223 CORDS ULW V31 GIBBE	
Syracuse (SYR)	(Turbojets) NEION J223 CORDS CFB V29	
Tampa (TPA)	BEADS V139 SARDI RBV J230 J75 TAY LZARD–STAR	
	or	
	(GPS or DME/DME–IRU equipped) BEADS V139 SARDI RBV J230 J75 TAY DADES (RNAV)–STAR.	
Washington Dulles (IAD)	BEADS V139 SARDI RBV RBV289 V457 LRP V143 MULRR AML	
Washington Natl (DCA)	BEADS CCC148 J174 ATR085 ATR V308 BILIT	
	or	
	(GPS or DME/DME–IRU equipped) BEADS CCC148 J174 ATR085 ATR V308 LAFLN BILIT (RNAV)–STAR	
West Palm Beach (PBI)	(Water–Turbojets–GPS or DME/DME–IRU equipped) BEADS CCC148 J174 SWL CEBEE WETRO DIW AR19 AYBID FRWAY (RNAV)–STAR	
	or	
	(Turbojets–GPS or DME/DME–IRU equipped) BEADS CCC148 J174 ORF ISO J121 CHS J79 OMN FRWAY (RNAV)–STAR	
	or	
	(Turbojets) BEADS CCC148 J174 ORF ISO J121 CHS J79 OMN TUXXI–STAR	
	or	
	(Water–Turbojets) BEADS CCC148 J174 SWL CEBEE WETRO DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CASKI	
BUFFALO (BUF)		
Cincinnati (CVG)	(RNAV only) BUF JHW MAULL KODIE CTW TIGRR (RNAV)–STAR	
	or	

Terminals	Route	Effective Times (UTC)
	(all others) BUF JHW JHW194 MAULL SLT249 KODIE CTW081 CTW CINCE–STAR	
Detroit Satellites: Coleman A Young (DET), Pontiac (PTK), Windsor (CYQG), Ann Arbor (ARB), Willow Run (YIP)	YXU PICES–STAR or YXU GOHMA–STAR or YXU SWWAN–STAR	 1100–0300 1100–0300
Kennedy (JFK)	V33 J70 LVZ LENDY-STAR	
La Guardia (LGA)	(Above 250 kts) V14 GEE RKA HAARP–STAR or (250 kts or less) V14 BEEPS J522 EXTOL RKA292 RKA NOBBI-STAR	1110–0300
Newark (EWR)	(Above 250 kts) V14 BEEPS J522 HNK SHAFF-STAR or (250 kts or less) V14 BEEPS J522 HNK V167 WEARD V489 COATE	
Philadelphia (PHL)	V33 BFD PSB HAR V210 BUNTS	
BURLINGTON (BTV)		
Chicago O'Hare (ORD)	ART YSO J546 ECK TVC PAITN-STAR	1100–0300
Cincinnati (CVG)	(RNAV only) SYR J29 JOSSY MAULL KODIE CTW TIGRR–STAR or (all others) SYR J29 KELIE SLT SLT249 KODIE CTW081 CTW CINCE–STAR	
La Guardia (LGA)	ALB PWL IGN V157	1100–0300
Newark (EWR)	ALB V213 SAX	1100–0300
Philadelphia (PHL)	(Turbojets only) ALB DNY SLATT–STAR	
Pittsburgh (PIT)	ALB J49 HNK HNK271 J190 SLT GRACE–STAR	1100–0300
Washington Dulles (IAD)	(Turbojets) ALB J6 LRP DELRO–STAR or (Turboprops) ALB LHY V106 SEG SEG–STAR	1100–0300 1100–0300
CHARLESTON (CRW)		
Cleveland (CLE)	TVT KEATN–STAR	
Houston George Bush Intcntl (IAH)	(Turbojets–GPS or DME/DME–IRU equipped) LIT J180 SWB TXMEX (RNAV)–STAR or (non–advanced NAV only) LIT J180 SWB DAS–STAR	
Houston Hobby (HOU)	(GPS or DME/DME–IRU equipped) LIT J180 SWB ROKIT (RNAV)–STAR or (non–advanced NAV only) LIT J180 SWB DAS–STAR	
CHARLOTTESVILLE (CHO)		
Cincinnati (CVG)	HNN090/50 GAVNN or (RNAV only–at or below FL220) HNN GAVNN (RNAV)–STAR or (all others–at or above FL240) HNN090/50 HNN JAVIT–STAR or (all others–at or below FL220) HNN JAVIT–STAR	
HARRISBURG (MDT)		
Chicago (ORD)	HAR V33 MCMAN J64 MAINE ZANLA WATSN (RNAV)–STAR	
Cincinnati (CVG)	MRB J6 COLNS BRUSH–STAR or (RNAV only) MRB J6 COLNS GAVNN (RNAV)–STAR	

Terminals	Route	Effective Times (UTC)
ITHACA (ITH)		
Detroit Satellites: Coleman A Young (DET), Pontiac (PTK), Windsor (CYQG), Ann Arbor (ARB), Willow Run (YIP)	YXU PICES–STAR	
	or	
	YXU GOHMA–STAR	1100–0300
	or	
	YXU SWWAN–STAR	1100–0300
LONG ISLAND (Mac Arthur) (ISP)		
Baltimore (BWI)	BEADS EMJAY J174 ZIZZI ATROB5 ATR V308 BILIT	
Binghamton (BGM)	(Turbojets) NEION J223 CORDS CFB	
Boca Raton (BCT)	(Turbojets–GPS or DME/DME–IRU equipped) BEADS CCC148 J174 ORF ISO J121 CHS J79 OMN CAYSL (RNAV)–STAR	
	or	
	(Turbojets) BEADS CCC148 J174 ORF ISO J121 CHS J79 OMN TUXXI–STAR	
	or	
	(Water–Turbojets) BEADS CCC148 J174 SWL CEBEE WETRO DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CAYSL	
	or	
	(Water–Turbojets–GPS or DME/DME–IRU equipped) BEADS CCC148 J174 SWL CEBEE WETRO DIW AR19 AYBID CAYSL (RNAV)–STAR	
Boston (BOS)	MERIT ORW ORW–STAR	
Buffalo (BUF)	(Turbojets) NEION J223 CORDS ULW ULW306 V164	
	or	
	(Turboprops) GAYEL J95 CFB V270 ULW ULW306 V164	
Chicago O'Hare (ORD)	COATE J36 FNT PAITN–STAR	1100–0300
Cincinnati (CVG)	(RNAV only) BEADS V139 SARDI RBV J230 SAAME J6 COLNS GAVNN (RNAV)–STAR	
	or	
	(all others) BEADS V139 SARDI RBV J230 SAAME J6 COLNS BRUSH–STAR	
Dallas/Ft Worth (DFW)	BEADS V139 SARDI RBV J230 J6 LIT BYP	
Detroit Metro Wayne Co (DTW)	GAYEL J95 CFB CFB286 TRAAD ULW306 KOOPR YQO SPICA–STAR	
Detroit Satellites: Coleman A Young (DET), Windsor (CYQG), Pontiac (PTK), Willow Run (YIP), Ann Arbor (ARB)	GAYEL J95 CFB CFB286 TRAAD ULW306 KOOPR YQO	
Fort Lauderdale (FLL)	(Turbojets) BEADS CCC148 J174 ORF ISO J121 CHS J79 OMN GISSH–STAR	
	or	
	(Turboprops) BEADS CCC148 J174 ORF J121 CHS J79 OMN MLB BLUFI–STAR	
	or	
	(Turbojets–GPS or DME/DME–IRU equipped) BEADS CCC148 J174 ORF ISO J121 CHS J79 OMN FISEL (RNAV)–STAR	
	or	
	(Water–Turboprops) BEADS CCC148 J174 ILM AR21 CRANS HIILL FATHR GISSH–STAR	
	or	
	(Water–Turboprops–GPS or DME/DME–IRU equipped) BEADS CCC148 J174 ILM AR21 CRANS FISEL (RNAV)–STAR	
	or	

Terminals	Route	Effective Times (UTC)
	(Water–Turbojets) BEADS CCC148 J174 SWL CEBEE WETRO ILM AR21 CRANS HIILL FATHR GISSH–STAR	
	or	
	(Water–Turbojets–GPS or DME/DME–IRU equipped) BEADS CCC148 J174 SWL CEBEE WETRO ILM AR21 CRANS FISEL (RNAV)–STAR	
Fort Myers (RSW)	(WATER–Turbojets) BEADS CCC J174 SWL CEBEE WETRO ILM AR15 HIBAC SHFTY (RNAV)–STAR	
Ithaca (ITH)	(Turbojets) NEION J223 CORDS CFB V423	
Miami Metro Area:		
Miami (MIA, TMB, HST)	(Turbojets) BEADS CCC148 J174 ORF ISO J121 CHS J79 OMN ANNEY–STAR	
	or	
	(Water–Turbojets–GPS or DME/DME–IRU equipped) BEADS CCC148 J174 SWL CEBEE WETRO DIW AR22 JORAY HILEY (RNAV)–STAR	
	or	
	(Water–Turbojets) BEADS CCC148 J174 SWL CEBEE WETRO DIW AR22 JORAY OSOGY ENVOY YOSSI MILSY BOYUR HILEY KAINS	
	or	
	(Turbojets–GPS or DME/DME–IRU equipped) BEADS CCC148 J174 ORF ISO CHS J79 OMN HILEY (RNAV)–STAR	
	or	
	(Turboprops) BEADS CCC148 J174 ORF J121 CHS J79 OMN ANNEY–STAR	
Montreal (CYUL)	GREKI V419 JUDDS CAM J222 PLB PLB-STAR	
Orlando Executive (ORL)	BEADS CCC148 J174 ORF J121 CHS J79 OMN CORLL-STAR	1100–0300
	or	
	(GPS or DME/DME–IRU equipped) BEADS CCC148 J174 SWL CEBEE WETRO ILM AR15 HIBAC CWRLD (RNAV)–STAR	1100–0400
Orlando Intl (MCO)	(Water–Turbojets) BEADS CCC148 J174 SWL CEBEE WETRO ILM AR15 HIBAC APOLO ORL	
	or	
	BEADS CCC148 J174 ORF J121 CHS J79 OMN BITHO–STAR	1100–0300
	or	
	(GPS or DME/DME–IRU equipped) BEADS CCC148 J174 ORF J121 CHS J79 OMN CWRLD (RNAV)–STAR	1100–0400
	or	
	(GPS or DME/DME–IRU equipped) BEADS CCC148 J174 SWL CEBEE WETRO ILM AR15 HIBAC CWRLD (RNAV)–STAR	1100–0400
Pittsburgh (PIT)	(Turbojets) COATE J36 J190 SLT GRACE–STAR	
	or	
	(Turboprops) GAYEL V374 V58 LHY J36 J217 ETG V226 CIP GRACE–STAR	
Raleigh/Durham (RDU)	BEADS CCC148 J174 SWL ARGAL-STAR	
Richmond (RIC)	BEADS CCC148 J174 SWL V139 CCV HPW	
Rochester (ROC)	(Turbojets) NEION J223 CORDS ULW V31 GIBBE	
Syracuse (SYR)	(Turbojets) NEION J223 CORDS CFB V29	
Tampa TPA	BEADS V139 SARDI RBV J230 J75 TAY LZARD–STAR	
Washington Dulles (IAD)	BEADS V139 SARDI RBV RBV289 V457 LRP V143 MULRR AML	
Washington Natl (DCA)	BEADS CCC148 J174 ATR085 ATR V308 BILIT	
	or	
	(GPS or DME/DME–IRU equipped) BEADS CCC148 J174 ATR085 ATR V308 LAFLN BILIT (RNAV)–STAR	

Terminals	Route	Effective Times (UTC)
West Palm Beach (PBI)	(Turbojets) BEADS CCC148 J174 ORF ISO J121 CHS J79 OMN TUXXI–STAR	
	or	
	(Turbojets–GPS or DME/DME–IRU equipped) BEADS CCC148 J174 ORF ISO J121 CHS J79 OMN FRWAY (RNAV)–STAR	
	or	
	(Water–Turbojets) BEADS CCC148 J174 SWL CEBEE WETRO DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CASKI	
	or	
	(Water–Turbojets–GPS or DME/DME–IRU equipped) BEADS CCC148 J174 SWL CEBEE WETRO DIW AR19 AYBID FRWAY (RNAV)–STAR	
MANCHESTER (MHT)		
Atlanta (ATL)	(Advanced RNAV only) BAF J77 SAX J77 PTW J48 ODF	1100–0300
	or	
	(Advanced RNAV only) COTEE (RNAV)–DP BAF J77 SAX J77 PTW J48 ODF FLCON (RNAV)–STAR	1100–0300
	or	
	(All others) PSM PSM216/37 COTEE BAF J77 SAX J77 PTW J48 ODF WHINZ–STAR	1100–0300
Baltimore (BWI)	(Advanced RNAV only) COTEE (RNAV)–DP BDL CMK J75 MXE V378 BAL	1100–0300
	or	
	(All others) PSM PSM216/37 COTEE BDL CMK J75 MXE V378 BAL	1100–0300
Chicago O'Hare (ORD)	CAM SYR J63 EHMAN YXU J547 FNT PAITN–STAR	
Cincinnati (CVG)	(RNAV only) CAM J547 SYR JOSSY MAULL KODIE CTW TIGRR–STAR	
	or	
	(all others) CAM J547 SYR J29 KELIE SLT016 SLT SLT249 KODIE CTW081 CTW CINCE–STAR	
Detroit Satellites: Coleman A Young (DET), Pontiac (PTK), Ann Arbor (ARB), Windsor (CYQG), Willow Run (YIP)	SYR J547 YXU PICES–STAR	
	or	
	SYR J547 YXU GOHMA–STAR	1100–0300
	or	
	SYR J547 YXU SWWAN–STAR	1100–0300
Orlando (MCO)	(Advanced RNAV only) COTEE (RNAV)–DP BDL CMK J75 CAE J75 DUNKN AMG LEESE–STAR	1100–0300
	or	
	(All others) PSM PSM216/37 COTEE BDL CMK J75 CAE J75 DUNKN AMG LEESE–STAR	1100–0300
Tampa (TPA)	(Advanced RNAV only) COTEE (RNAV)–DP BDL CMK J75 TAY DADES (RNAV)–STAR	1100–0300
	or	
	(All others) PSM PSM216/37 COTEE BDL CMK J75 TAY DADES (RNAV)–STAR	1100–0300
Wash Dulles (IAD)	(Advanced RNAV only) COTEE (RNAV)–DP BAF J77 SAX J6 LRP DELRO–STAR	1100–0300
	or	
	(All others) PSM PSM216/37 COTEE BAF J77 SAX J6 LRP DELRO–STAR	1100–0300
Wash Natl (DCA)	(Advanced RNAV only) COTEE (RNAV)–DP BDL CMK J75 MXE V378 BAL	1100–0300
	or	
	(All others) PSM PSM216/37 COTEE BDL CMK J75 MXE V378 BAL	1100–0300
MONTREAL (CYUL)		
Cincinnati (CVG)	(RNAV only) YOW J546 YSO MAULL KODIE CTW TIGRR (RNAV)–STAR	
	or	

Terminals	Route	Effective Times (UTC)
	(all others) YOW J546 YSO YYZ JHW JHW194 MAULL SLT249 KODIE CTW081 CTW CINCE–STAR	
Detroit Metro–Wayne Co (DTW)	YOW J546	
Kennedy (JFK)	V282 J524 BUGSY J570 ALB IGN IGN-STAR	
La Guardia (LGA)	V282 J524 BUGSY J570 ALB PWL IGN V157	
MORRISTOWN (MMU)		
Marco Isle (MKY)	(Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY KEMPR ILM AR15 HIBAC SHFTY (RNAV)–STAR	
Naples (APF)	(Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY KEMPR ILM AR15 HIBAC SHFTY (RNAV)–STAR	
NEWBURGH (SWF)		
Cincinnati (CVG)	(RNAV only) WEARD LHY J36 DGRAF J49 PSB MAULL KODIE CTW TIGRR (RNAV)–STAR or (RNAV only) WEARD LHY J36 DGRAF J49 PSB MMJ CTW TIGRR (RNAV)–STAR or (all others) WEARD LHY J36 DGRAF J49 PSB PSB281 MAULL SLT249 KODIE CTW081 CTW CINCE–STAR	
NEW HAVEN (HVN)		
Baltimore (BWI)	BEADS V139 SARDI RBV J230 J75 MXE V378 BAL	
Binghamton (BGM)	(Turbojets) NEION J223 CORDS CFB	
Boca Raton (BCT)	(Turbojets–GPS or DME/DME–IRU equipped) BEADS CCC148 J174 ORF ISO J121 CHS J79 OMN CAYSL (RNAV)–STAR or (Turbojets) BEADS CCC148 J174 ORF ISO J121 CHS J79 OMN TUXXI–STAR or (Water–Turbojets) BEADS CCC148 J174 SWL CEBEE WETRO DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CAYSL or (Water–Turbojets–GPS or DME/DME–IRU equipped) BEADS CCC148 J174 SWL CEBEE WETRO DIW AR19 AYBID CAYSL (RNAV)–STAR	
Buffalo (BUF)	(Turbojets) NEION J223 CORDS ULW ULW306 V164 or (Turboprops) GAYEL J95 CFB V270 ULW ULW306 V164	
Chicago O'Hare (ORD)	COATE J36 FNT PAITN–STAR	1100–0300
Dallas/Ft Worth (DFW)	BEADS V139 SARDI RBV J230 J6 LIT BYP	
Detroit Metro Wayne Co (DTW)	GAYEL J95 CFB CFB286 TRAAD ULW306 KOOPR YQO SPICA–STAR	1100–0300
Detroit Satellites: Coleman A Young (DET), Windsor (CYQG), Pontiac (PTK), Willow Run (YIP), Ann Arbor (ARB)	GAYEL J95 CFB CFB286 TRAAD ULW306 KOOPR YQO	1100–0300
Fort Lauderdale (FLL)	(Water–Turboprops) BEADS CCC148 J174 ILM AR21 CRANS HIILL FATHR GISSH–STAR or (Turbojets) BEADS CCC148 J174 ORF ISO J121 CHS J79 OMN GISSH–STAR or (Turboprops) BEADS CCC148 J174 ORF J121 CHS J79 OMN MLB BLUFI–STAR or	

Terminals	Route	Effective Times (UTC)
	(Water–Turbojets) BEADS CCC148 J174 SWL CEBEE WETRO ILM AR21 CRANS HIILL FATHR GISSH–STAR	
	or	
	(Water–Turbojets–GPS or DME/DME–IRU equipped) BEADS CCC148 J174 SWL CEBEE WETRO ILM AR21 CRANS FISEL (RNAV)–STAR	
	or	
	(Water–Turboprops–GPS or DME/DME–IRU equipped) BEADS CCC148 J174 ILM AR21 CRANS FISEL (RNAV)–STAR	
	or	
	(Turbojets–GPS or DME/DME–IRU equipped) BEADS CCC148 J174 ORF ISO J121 CHS J79 OMN FISEL (RNAV)–STAR	
Ithaca (ITH)	(Turbojets) NEION J223 CORDS CFB V423	
Miami (MIA)	(Turbojets) BEADS CCC148 J174 ORF ISO J121 CHS J79 OMN ANNEY–STAR	
	or	
	(Turboprops) BEADS CCC148 J174 ORF J121 CHS J79 OMN ANNEY–STAR	
	or	
	(Water–Turbojets) BEADS CCC148 J174 SWL CEBEE WETRO DIW AR22 JORAY OSOGY ENVOY YOSSI MILSY BOYUR HILEY KAINS	
	or	
	(Turbojets–GPS or DME/DME–IRU equipped) BEADS CCC148 J174 ORF ISO J121 CHS J79 OMN HILEY (RNAV)–STAR	
	or	
	(Water–Turbojets–GPS or DME/DME–IRU equipped) BEADS CCC148 J174 SWL CEBEE WETRO DIW AR22 JORAY HILEY (RNAV)–STAR	
Montreal (CYUL)	SOARS V419 JUDDS CAM J222 PLB PLB-STAR	
Orlando Executive (ORL)	(Turbojets) BEADS CCC148 J174 ORF J121 CHS J79 OMN CORLL–STAR	1100–0300
	or	
	(Water–Turbojets) BEADS CCC148 J174 SWL CEBEE WETRO ILM AR15 HIBAC APOLO ORL	
	or	
	(GPS or DME/DME–IRU equipped) BEADS CCC148 J174 SWL CEBEE WETRO ILM AR15 HIBAC CWRLD (RNAV)–STAR	1100–0400
Orlando Intl (MCO)	(Turbojets) BEADS CCC148 J174 ORF J121 CHS J79 OMN BITHO–STAR	1100–0300
	or	
	(GPS or DME/DME–IRU equipped) BEADS CCC148 J174 ORF J121 CHS J79 OMN CWRLD (RNAV)–STAR	1100–0400
	or	
	(GPS or DME/DME–IRU equipped) BEADS CCC148 J174 SWL CEBEE WETRO ILM AR15 HIBAC CWRLD (RNAV)–STAR	1100–0400
Pittsburgh (PIT)	(Turbojets) COATE J36 J190 SLT GRACE–STAR	
	or	
	(Turboprops) GAYEL V374 V58 LHY J36 J217 ETG V226 CIP GRACE–STAR	
Raleigh/Durham (RDU)	BEADS CCC148 J174 SWL ARGAL-STAR	
Richmond (RIC)	BEADS CCC148 J174 SWL V139 CCV HPW	
Rochester (ROC)	GAYEL J95 CFB V252 GIBBE	
Syracuse (SYR)	(Turbojets) NEION J223 CORDS CFB V29	
Tampa (TPA)	BEADS V139 SARDI RBV J230 J75 TAY LZARD–STAR	
	or	
	(GPS or DME/DME–IRU equipped) BEADS V139 SARDI RBV J230 J75 TAY DADES (RNAV)–STAR.	

Terminals	Route	Effective Times (UTC)
Washington Dulles (IAD)	BEADS V139 SARDI RBV RBV289 V457 LRP V143 MULRR AML	
Washington Natl (DCA)	BEADS CCC148 J174 ATR085 ATR V308 BILIT or (GPS or DME/DME–IRU equipped) BEADS CCC148 J174 ATR085 ATR V308 LAFLN BILIT (RNAV)–STAR	
West Palm Beach (PBI)	(Water–Turbojets) BEADS CCC148 J174 SWL CEBEE WETRO DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CASKI or (Water–Turbojets–GPS or DME/DME–IRU equipped) BEADS CCC148 J174 SWL CEBEE WETRO DIW AR19 AYBID FRWAY (RNAV)–STAR or (Turbojets–GPS or DME/DME–IRU equipped) BEADS CCC148 J174 ORF ISO J121 CHS J79 OMN FRWAY (RNAV)–STAR or (Turbojets) BEADS CCC148 J174 ORF ISO J121 CHS J79 OMN TUXXI–STAR	
NEW YORK METRO AREA		
From KENNEDY (JFK) only		
Atlanta (ATL)	RBV J230 J48 ODF WHINZ-STAR or (RNAV only) RBV J230 J48 ODF FLCON RNAV–STAR or RBV J230 J48 ODF WHINZ–STAR	
Augusta (AGS)	RBV J230 J75 GVE J37 SPA	1100–0300
Baltimore (BWI)	RBV RBV274 MXE056 MXE V378 BAL	
Binghamton (BGM)	(Turbojets) NEION J223 CORDS CFB	
Boca Raton (BCT)	(Turbojets–GPS or DME/DME–IRU equipped) WAVEY EMJAY J174 ORF ISO J121 CHS J79 OMN CAYSL (RNAV)–STAR or (Turbojets) WAVEY EMJAY J174 ORF ISO J121 CHS J79 OMN TUXXI–STAR or (Water–Turbojets) WAVEY EMJAY J174 SWL CEBEE WETRO DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CAYSL or (Water–Turbojets–GPS or DME/DME–IRU equipped) WAVEY EMJAY J174 SWL CEBEE WETRO DIW AR19 AYBID CAYSL (RNAV)–STAR	
Buffalo (BUF)	(Turbojets) NEION J223 CORDS ULW ULW306 V164 or (Turboprops) GAYEL J95 CFB V270 ULW ULW306 V164	
Burlington (BTV)	GREKI V419 JUDDS CAM	
Charleston (CHS)	WAVEY EMJAY J174 SWL J121	
Charlotte (CLT)	RBV J230 J75 GVE LYH MAJIC-STAR	
Charlottesville (CHO)	RBV J230 J75 GVE	
Chicago Midway (MDW)	RBV J64 FWA GSH-STAR	
Chicago O'Hare (ORD)	COATE J36 FNT PAITN–STAR	0000–2359
Cincinnati (CVG)	(RNAV only) RBV J230 SAAME J6 COLNS GAVNN (RNAV)–STAR or (all others) RBV J230 SAAME J6 COLNS BRUSH–STAR	
Cleveland (CLE)	RBV J64 PSB115 PSB PSB292 YNG CXR	
Columbia (CAE)	RBV J230 J75	
Columbus (CMH)	RBV J230 AIR AIR260 BREMN	

Terminals	Route	Effective Times (UTC)
Dallas/Ft. Worth (DFW)	RBV J230 J6 LIT BYP	
Dayton (DAY)	RBV J230 AIR APE DANEI–STAR	
Denver (DEN)	RBV J230 AIR APE J178 FWA J0T J60 IOW J10 LBF SAYGE–STAR	
Detroit Metro-Wayne Co (DTW)	GAYEL J95 CFB CFB286 TRAAD ULW306 KOOPR YQO SPICA–STAR	
Detroit Satellites: (DET), Windsor	GAYEL J95 CFB CFB286 TRAAD ULW306 KOOPR YQO	
(CYQG), Pontiac (PTK), Willow Run (YIP), Ann Arbor (ARB)	GAYEL J95 CFB CFB286 TRAAD ULW306 KOOPR YQG	
Fayetteville (FAY)	RBV J230 J75 GVE SBV RDU	
Ft Lauderdale (FLL, FXE, OPF)	(Water–Turbojets) WAVEY EMJAY J174 SWL CEBEE WETRO ILM AR21 CRANS HIILL FATHR GISSH–STAR or (Water–Turbojets–GPS or DME/DME–IRU equipped) WAVEY EMJAY J174 SWL CEBEE WETRO ILM AR21 CRANS FISEL (RNAV)–STAR or (Turbojets) WAVEY EMJAY J174 ORF ISO J121 CHS J79 OMN GISSH–STAR or (Turbojets–GPS or DME/DME–IRU equipped) WAVEY EMJAY J174 ORF ISO J121 CHS J79 OMN FISEL (RNAV)–STAR or (Turboprops) WAVEY EMJAY J174 ORF J121 CHS J79 OMN MLB BLUFI–STAR or (Water–Turboprops) WAVEY EMJAY J174 ILM AR21 CRANS HIILL FATHR GISSH–STAR or (Water–Turboprops–GPS OR DME/DME–IRU equipped) WAVEY EMJAY J174 ILM AR21 CRANS FISEL (RNAV)–STAR	
Fort Myers (FMY, RSW)	(GPS or DME/DME–IRU equipped) RBV J230 J75 GSO J75 DUNKN SHFTY (RNAV)–STAR or (WATER–Turbojets) WAVEY EMJAY J174 SWL CEBEE WETRO ILM AR15 HIBAC SHFTY (RNAV)–STAR	
Greensboro (GSO)	RBV J230 J75 GVE LYH V222 HENBY	0000–2359
Houston George Bush Intcntl (IAH)	(non–advanced NAV only) RBV J230 J48 MOL J22 VUZ AEX DAS-STAR or (Turbojets–GPS or DME/DME–IRU equipped) RBV J230 J48 MOL J22 VUZ AEX TXMEX (RNAV)–STAR	
Houston Hobby (HOU)	(non–advanced NAV only) RBV J230 J48 MOL J22 VUZ AEX DAS–STAR or (GPS or DME/DME–IRU equipped) RBV J230 J48 MOL J22 VUZ AEX ROKIT–STAR	
Indianapolis (IND)	RBV J230 AIR J80 EMPTY DQN CLANG-STAR	
Ithaca (ITH)	(Turbojets) NEION J223 CORDS CFB V423	
Jacksonville (JAX)	WAVEY EMJAY J174 CHS BRUNSWICK–STAR	
Kansas City (MKC)	RBV J230 AIR J80 SPI BRAYMER–STAR	
Knoxville (TYS)	RBV J230 J48 MOL J22	
Los Angeles (LAX)	RBV J230 AIR J80 MCI J24 SLN J102 ALS J44 RSK	
Louisville (SDF)	RBV J230 J6 HVQ J6 YOCKY DARBY–STAR	
Marco Island (MKY)	(GPS or DME/DME–IRU equipped) RBV J230 J75 GSO J75 DUNKN SHFTY (RNAV)–STAR	
Memphis (MEM)	RBV J230 J6 BWG WLDER-STAR	

Terminals	Route	Effective Times (UTC)
Miami (MIA, TMB, HST)	(Turbojets–GPS or DME/DME–IRU equipped) WAVEY EMJAY J174 ORF ISO J121 CHS J79 OMN HILEY (RNAV)–STAR	
	or	
	(Water–Turbojets–GPS or DME/DME–IRU equipped) WAVEY EMJAY J174 SWL CEBEE WETRO DIW AR22 JORAY HILEY (RNAV)–STAR	
	or	
	(Water–Turbojets) WAVEY EMJAY J174 SWL CEBEE WETRO DIW AR22 JORAY OSOGY ENVOY YOSSI MILSY BOYUR HILEY KAINS	
	or	
	(Turbojets) WAVEY EMJAY J174 ORF ISO J121 CHS J79 OMN ANNEY–STAR	
	or	
	(Turboprops) WAVEY EMJAY J174 ORF J121 CHS J79 ANNEY–STAR	
Milwaukee (MKE)	COATE J36 FNT MKG V2 SUDDS	
Minneapolis (MSP)	GAYEL J95 BUF YWT J63 TVC J522 GRB EAU-STAR	
Montreal (CYUL)	GREKI V419 JUDDS CAM J222 PLB PLB-STAR	
Naples (APF)	(Turbojets–GPS or DME/DME–IRU equipped) RBV J230 J75 GSO J75 DUNKN SHFTY (RNAV)–STAR	
Nashville (BNA)	RBV J230 J6 YOCKY GUITR- STAR	
New Orleans (MSY)	RBV J230 J48 MOL J22 MEI J31	
Norfolk (ORF)	WAVEY EMJAY J174 SWL V139 CCV	
Orlando Executive (ORL)	(Turbojets) WAVEY EMJAY J174 ORF J121 CHS J79 OMN CORLL–STAR	1100–0300
	or	
	(GPS or DME/DME–IRU equipped) WAVEY EMJAY J174 SWL CEBEE WETRO ILM AR15 HIBAC CWRLD (RNAV)–STAR	1100–0400
Orlando Intl (MCO)	(Turbojets) WAVEY EMJAY J174 ORF J121 CHS J79 OMN BITHO–STAR	1100–0300
	or	
	(Water–Turbojets) WAVEY EMJAY J174 SWL CEBEE WETRO ILM AR15 HIBAC APOLO ORL	
	or	
	(GPS or DME/DME–IRU equipped) WAVEY EMJAY J174 ORF J121 CHS J79 OMN CWRLD (RNAV)–STAR	1100–0400
	or	
	(GPS or DME/DME–IRU equipped) WAVEY EMJAY J174 SWL CEBEE WETRO ILM AR15 HIBAC CWRLD (RNAV)–STAR	1100–0400
Phoenix (PHX)	RBV J230 AIR J110 STL J19 ZUN FOSSL-STAR	
Pittsburgh (PIT)	(Turbojets) COATE J36 J190 SLT GRACE–STAR	
	or	
	(Turboprops) GAYEL V374 V58 LHY J36 J217 ETG V226 CIP GRACE–STAR	
Raleigh/Durham (RDU)	WAVEY EMJAY J174 SWL ARGAL-STAR	
Richmond (RIC)	WAVEY EMJAY J174 SWL V139 CCV HPW	
Roanoke (ROA)	RBV J230 J48 MOL	
Rochester (ROC)	(Turbojets) NEION J223 CORDS ULW V31 GIBBE	
Salt Lake City (SLC)	GAYEL J95 BUF J16 BAE DBQ J94 OCS OGD	
San Francisco (SFO)	GAYEL J95 BUF J16 ECK J38 GRB J106 GEP J70 ABR J32 FMG GOLDEN GATE–STAR	
Sarasota/Bradenton (SRQ)	RBV J230 J75 TAY J85 GNV LAL	
Savannah (SAV)	WAVEY EMJAY J174 ORF J121 CHS	
St. Louis (STL)	RBV J230 AIR J110 VHP VLA-STAR	
St. Petersburg (PIE)	RBV J230 J75 TAY LZARD–STAR	
Syracuse (SYR)	(Turbojets) NEION J223 CORDS CFB V29	
Tampa (TPA)	RBV J230 J75 TAY LZARD–STAR	
	or	

Terminals	Route	Effective Times (UTC)
	(GPS or DME/DME–IRU equipped) RBV J230 J75 TAY DADES (RNAV)–STAR	
Toronto (CYYZ)	GAYEL J95 BUF V36	
Washington Dulles (IAD)	RBV RBV289 V457 LRP V143 MULRR AML	
Washington Natl (DCA)	(Turbojets only FL 180–FL 220) WAVEY EMJAY J174 ZIZZI ATR085 ATR V308 BILIT DCA	
	or	
	(Turbojets only/FL180–FL220/GPS or DME/DME–IRU equipped) WAVEY EMJAY J174 ZIZZI ATR085 ATR V308 LAFLN BILIT (RNAV)–STAR	
West Palm Beach (PBI)	(Water–Turbojets–GPS or DME/DME–IRU equipped) WAVEY EMJAY J174 SWL CEBEE WETRO DIW AR19 AYBID FRWAY (RNAV)–STAR	
	or	
	(Turbojets) WAVEY EMJAY J174 ORF ISO J121 CHS J79 OMN TUXXI–STAR	
	or	
	(Turbojets–GPS or DME/DME–IRU equipped) WAVEY EMJAY J174 ORF ISO J121 CHS J79 OMN FRWAY (RNAV)–STAR	
	or	
	(Water–Turbojets) WAVEY EMJAY J174 SWL CEBEE WETRO DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CASKI	
From **LA GUARDIA (LGA)** only		
Akron/Canton (CAK)	ELIOT J60 PSB PSB292060 YNG V72 ACO	
Allegheny County (AGC)	ELIOT J80 VINSE NESTO–STAR	
Atlanta (ATL)	LANNA J48 ODF WHINZ–STAR	
	or	
	(RNAV only) LANNA J48 ODF FLCON (RNAV)–STAR	
Augusta (AGS)	BIGGY J75 GVE J37 SPA	
Baltimore (BWI)	BIGGY J75 MXE V378 BAL	
Binghamton (BGM)	(Turbojets) NEION J223 CORDS CFB	
Birmingham (BHM)	LANNA J48 MOL J22 VXV VUZ	
Boca Raton (BCT)	(Turbojets) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN TUXXI–STAR	
	or	
	(Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN CAYSL (RNAV)–STAR	
	or	
	(Water–Turbojets) WAVEY EMJAY J174 SWL CEBEE WETRO DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CAYSL	
	or	
	(Water–Turbojets–GPS or DME/DME–IRU equipped) WAVEY EMJAY J174 SWL CEBEE WETRO DIW AR19 AYBID CAYSL (RNAV)–STAR	
Boston (BOS)	MERIT ORW ORW–STAR	
Buffalo (BUF)	(Turbojets) NEION J223 CORDS ULW ULW306 V164	
	or	
	(Turboprops) COATE J36 ULW141 ULW ULW306 V164	
Burlington (BTV)	GREKI V419 JUDDS CAM	
Charleston (CHS)	(Turbojets) WHITE J209 SBY J79 KATZN TYI CHS	
Charleston (CRW)	PARKE J6 HVQ	
Charlotte (CLT)	BIGGY J75 GVE LYH MAJIC-STAR	
Charlottesville (CHO)	BIGGY J75 GVE	
Chattanooga (CHA)	LANNA J48 MOL J22 VXV	
Chicago Midway (MDW)	ELIOT J60 GSH GSH-STAR	
Chicago O'Hare (ORD)	COATE J36 FNT PAITN–STAR	0000–2359
Cincinnati (CVG)	(RNAV only) PARKE J6 COLNS GAVNN (RNAV)–STAR	
	or	

Terminals	Route	Effective Times (UTC)
	(all others) PARKE J6 COLNS BRUSH–STAR	
Cleveland (CLE)	ELIOT J60 PSB PSB292 YNG CXR	
Columbus (CMH)	ELIOT J80 AIR AIR260 BREMN	
Dallas/Fort Worth (DFW)	PARKE J6 LIT BYP	
Dayton (DAY)	ELIOT J80 AIR APE DANEI–STAR	
Daytona Beach (DAB)	WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN	
Dekalb/Peachtree (PDK)	LANNA J48 ODF AWSON-STAR	
Denver (DEN)	ELIOT J60 IOW J10 LBF SAYGE–STAR	
Detroit Metro Wayne Co (DTW)	GAYEL J95 CFB CFB286 TRAAD ULW306 KOOPR YQO SPICA–STAR	
Detroit Satellites: Ann Arbor (ARB), Coleman A Young (DET), Pontiac (PTK), Willow Run (YIP), Windsor (CYQG)	GAYEL J95 BUF J547 YXU PICES–STAR or	
	GAYEL J95 BUF J547 YXU GOHMA–STAR or	1100–0300
	GAYEL J95 BUF J547 YXU SWWAN–STAR	1100–0300
Windsor (CYQG)	GAYEL J95 CFB CFB286 TRAAD ULW306 KOOPR YQG	
Fayetteville (FAY)	BIGGY J75 GVE SBV RDU	
Fort Lauderdale (FLL, FXE, OPF)	(Water–Turbojets) WHITE J209 SBY KEMPR ILM AR21 CRANS HIILL FATHR GISSH–STAR or (Water–Turbojets GPS or DME/DME–IRU equipped) WHITE J209 SBY KEMPR ILM AR21 CRANS FISEL (RNAV)–STAR or (Turbojets) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN GISSH–STAR or (Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY J79 KATZN ISO J121 CHS OMN FISEL (RNAV)–STAR or (Turboprops) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 VRB BLUFI–STAR or (Water–Turboprops) WHITE J209 SBY KEMPR ILM AR21 CRANS HIILL FATHR GISSH–STAR or (Water–Turboprops GPS or DME/DME–IRU equipped) WHITE J209 SBY KEMPR ILM AR21 CRANS FISEL (RNAV)–STAR	
Fort Myers (FMY, RSW)	(GPS or DME/DME–IRU equipped) BIGGY J75 GSO J75 DUNKN SHFTY (RNAV)–STAR or (WATER–Turbojets–GPS or DME/DME–IRU equipped) WAVEY EMJAY J174 SWL CEBEE WETRO ILM AR15 HIBAC SHFTY (RNAV)–STAR	
Fort Wayne (FWA)	ELIOT J80 SUZIE J64	
Greensboro (GSO)	BIGGY J75 GVE LYH V222 HENBY	0000–2359
Greer (GSP)	BIGGY J75 GVE J37 SPA	
Hot Springs (HSP)	LANNA J48 EMI CSN V140 MOL	
Houston George Bush Intcntl (IAH)	(non–advanced NAV only) LANNA J48 MOL J22 VUZ AEX DAS–STAR or (Turbojets–GPS or DME/DME–IRU equipped) LANNA J48 MOL J22 VUZ AEX TXMEX (RNAV)–STAR	
Houston Hobby (HOU)	(GPS or DME/DME–IRU equipped) LANNA J48 MOL J22 VUZ AEX ROKIT (RNAV)–STAR or (non–advanced NAV only) LANNA J48 MOL J22 VUZ AEX DAS–STAR	

Terminals	Route	Effective Times (UTC)
Indianapolis (IND)	ELIOT J80 EMPTY DQN CLANG-STAR	
Ithaca (ITH)	(Turbojets) NEION J223 CORDS CFB V423	
Jacksonville (JAX)	(Turbojets) WHITE J209 SBY J79 CHS SSI–STAR	
Kansas City (MKC)	ELIOT J80 SPI BQS-STAR	
Knoxville (TYS)	LANNA J48 MOL J22	
Lewisburg (LWB)	LANNA J48 EMI CSN V140 MOL	
Lexington (LEX)	PARKE J6 HVQ	
Louisville (SDF)	PARKE J6 HVQ J6 YOCKY DARBY–STAR	
Marco Island (MKY)	(GPS or DME/DME–IRU equipped) BIGGY J75 GSO J75 DUNKN SHFTY (RNAV)–STAR	
Melbourne (MLB)	WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN BITHO-STAR	
Memphis (MEM)	PARKE J6 BWG WLDER-STAR	
Miami (MIA, TMB, HST)	(Water–Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY KEMPR DIW AR22 JORAY HILEY (RNAV)–STAR	
	or	
	(Turbojets–GPS or DME–DME/DME–IRU equipped) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN HILEY (RNAV)–STAR	
	or	
	(Water–Turbojets) WHITE J209 SBY KEMPR DIW AR22 JORAY OSOGY ENVOY YOSSI MILSY BOYUR HILEY KAINS	
	or	
	(Turbojets) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN ANNEY–STAR	
	or	
	(Turboprops) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN ANNEY–STAR	
Milwaukee (MKE)	COATE J36 FNT MKG V2 SUDDS	
Minneapolis (MSP)	GAYEL J95 BUF YWT J63 TVC J522 GRB EAU-STAR	
Mobile (MOB)	BIGGY J75 GVE J37 MGM MVC V20 AXSIS	
Montgomery (MGM)	BIGGY J75 GVE J37	
Montreal (CYUL)	GREKI V419 JUDDS CAM J222 PLB PLB-STAR	
Naples (APF)	(Turbojets–GPS or DME/DME–IRU equipped) BIGGY J75 GSO J75 DUNKN SHFTY (RNAV)–STAR	
Nashville (BNA)	PARKE J6 YOCKY GUITR- STAR	
New Orleans (MSY, NEW)	LANNA J48 MOL J22 MEI J31	
Norfolk (ORF)	WHITE J209 SBY V1 CCV	
Omaha (OMA)	ELIOT J60 IOW DSM	
Orlando Executive (ORL)	(Turbojets) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN CORLL-STAR	1100–0300
	or	
	(GPS or DME/DME–IRU equipped) WHITE J209 SBY KEMPR ILM AR15 HIBAC CWRLD (RNAV)–STAR	1100–0400
Orlando Intl (MCO)	(Water–Turbojets) WHITE J209 SBY KEMPR ILM AR15 HIBAC APOLO ORL	
	or	
	(Turbojets) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN BITHO–STAR	1100–0300
	or	
	(GPS or DME/DME–IRU equipped) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN CWRLD (RNAV)–STAR	1100–0400
	or	
	(GPS or DME/DME–IRU equipped) WHITE J209 SBY KEMPR ILM AR15 HIBAC CWRLD (RNAV)–STAR	1100–0400
Phoenix (PHX)	ELIOT J80 AIR J110 STL J19 ZUN FOSSL-STAR	
Pittsburgh (PIT)	ELIOT J80 VINSE NESTO–STAR	
Portland (PWM)	GREKI V419 JUDDS CAM CON CON067 PARSO	

Terminals	Route	Effective Times (UTC)
Raleigh/Durham (RDU)	WHITE J209 CYN J37 J191 PXT PXT238 HPW025 HPW ARGAL-STAR	
Richmond (RIC)	WHITE J209 SBY V1 CCV HPW	
Roanoke (ROA)	LANNA J48 MOL	
Rochester (ROC)	(Turbojets) NEION J223 CORDS ULW V31 GIBBE or (Turboprops) COATE J36 CFB154 CFB V252 GIBBE	
Salt Lake City (SLC)	GAYEL J95 BUF J16 ECK J38 GRB ODI FSD J82 RAP J158 DDY J107 OCS OGD	
Sarasota/Bradenton (SRQ)	BIGGY J75 TAY J85 GNV LAL	
Savannah (SAV)	(Turbojets) WHITE J209 SBY J79 CHS	
St. Louis (STL)	ELIOT J80 AIR J110 VHP VLA-STAR	
St. Petersburg (PIE)	BIGGY J75 TAY LZARD–STAR	
Syracuse (SYR)	(Turbojets) NEION J223 CORDS CFB V29 or (Turboprops) COATE J36 CFB154 CFB	
Tampa (TPA)	BIGGY J75 TAY LZARD–STAR	
Toledo (TOL)	ELIOT J60 DJB VWV	
Toronto (CYYZ)	(Turbojets) GAYEL J95 BUF V36 or (Turboprops) COATE J36 ULW141 ULW V36	
Tri-City (TRI)	LANNA J48 MOL J22 PSK V16 HMV	
Washington Dulles (IAD)	PARKE J6 LRP V143 MULRR AML	
Washington Natl (DCA)	BIGGY J75 MXE V378 BAL or (GPS or DME/DME–IRU equipped) BIGGY J75 MXE CLIPR (RNAV)–STAR	
West Palm Beach (PBI)	(Water–Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY KEMPR DIW AR19 AYBID FRWAY (RNAV)–STAR or (Water–Turbojets) WHITE J209 SBY KEMPR DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CASKI or (Turbojets) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN TUXXI–STAR or (Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN FRWAY (RNAV)–STAR	
Winston-Salem (INT)	BIGGY J75 GSO	
Youngstown (YNG)	ELIOT J60 PSB PSB292060	
From **NEWARK (EWR)** only		
Akron (CAK)	ELIOT J60 PSB PSB292 YNG V72 ACO	
Akron (AKR)	ELIOT J60 PSB PSB292060 YNG V72 ACO	
Allegheny County (AGC)	ELIOT J80 VINSE NESTO–STAR	
Atlanta (ATL)	LANNA J48 ODF WHINZ–STAR or (RNAV only) LANNA J48 ODF FALCON (RNAV)–STAR	
Augusta (AGS)	BIGGY J75 GVE J37 SPA	1100–0300
Baltimore (BWI)	BIGGY J75 MXE V378 BAL	
Binghamton (BGM)	NEION J223 CORDS CFB	
Birmingham (BHM)	LANNA J48 MOL J22 VXV VUZ	
Boca Raton (BCT)	(Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN CAYSL (RNAV)–STAR or (Turbojets) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN TUXXI–STAR or (Water–Turbojets GPS or DME/DME–IRU equipped) WHITE J209 SBY KEMPR DIW AR19 AYBID CAYSL (RNAV)–STAR	

Terminals	Route	Effective Times (UTC)
	or	
	(Water–Turbojets) WHITE J209 SBY KEMPR DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CAYSL	
Buffalo (BUF)	(Turbojets) NEION J223 CORDS ULW ULW306 V164	
	or	
	(Turboprops) COATE J36 ULW141 ULW ULW306 V164	
Charleston (CHS)	(Turbojets) WHITE J209 SBY J79 KATZN TYI CHS	
Charleston (CRW)	PARKE J6 HVQ	
Charlotte (CLT)	BIGGY J75 GVE LYH MAJIC-STAR	1100– 0300
Charlottesville (CHO)	BIGGY J75 GVE	
Chattanooga (CHA)	LANNA J48 MOL J22 VXV	
Chicago Midway (MDW)	ELIOT J60 GSH GSH-STAR	
Chicago O'Hare (ORD)	COATE J36 FNT PAITN–STAR	0000–2359
Cincinnati (CVG)	PARKE J6 COLNS HNN JAVIT–STAR	
	or	
	COLNS JAVIT–STAR	
	or	
	(RNAV only) PARKE J6 COLNS GAVNN (RNAV)–STAR	
	or	
	(all others) PARKE J6 COLNS BRUSH–STAR	
Cleveland (CLE)	ELIOT J60 PSB PSB292 YNG CXR	
Columbus (CMH)	ELIOT J80 AIR AIR260 BREMN	
Dallas/Fort Worth (DFW)	PARKE J6 LIT BYP	
Dayton (DAY)	ELIOT J80 AIR APE DANEI–STAR	
Daytona Beach (DAB)	WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN	
Dekalb (Peachtree) (PDK)	LANNA J48 ODF AWSON-STAR	
Denver (DEN)	ELIOT J60 IOW J10 LBF SAYGE–STAR	
Detroit Metro Wayne Co (DTW)	GAYEL J95 CFB CFB286 TRAAD ULW306 KOOPR YQO SPICA–STAR	
Detroit Satellites:		
Coleman A Young (DET), Windsor (CYQG), Pontiac (PTK), Willow Run (YIP)	GAYEL J95 CFB CFB286 TRAAD ULW306 KOOPR YQO	
Ann Arbor (ARB)	GAYEL J95 CFB CFB286 TRAAD ULW306 KOOPER YQG	
Fayetteville (FAY)	BIGGY J75 GVE SBV RDU	
Fort Lauderdale (FLL)	(Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN FISEL (RNAV)–STAR	
	or	
	(Water–Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY KEMPR ILM AR21 CRANS FISEL (RNAV)–STAR	
	or	
	(Water–Turbojets) WHITE J209 SBY KEMPR ILM AR21 CRANS HIILL FATHR GISSH–STAR	
	or	
	(Water–Turboprops) WHITE J209 SBY KEMPR ILM AR21 CRANS HIILL FATHR GISSH–STAR	
	or	
	(Turbojets) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN GISSH–STAR	
	or	
	(Turboprops) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN MLB BLUFI–STAR	
	or	
	(Water–Turboprops–GPS or DME/DME–IRU equipped) WHITE J209 SBY KEMPR ILM AR21 CRANS FISEL (RNAV)–STAR	

Terminals	Route	Effective Times (UTC)
Fort Myers (FMY, RSW)	(GPS or DME/DME–IRU equipped) BIGGY J75 GSO J75 DUNKN SHFTY (RNAV)–STAR	
Fort Wayne (FWA)	ELIOT J80 SUZIE J64	
Greensboro (GSO)	BIGGY J75 GVE LYH V222 HENBY	0000–2359
Greer (GSP)	BIGGY J75 GVE J37 SPA	
Hot Springs (HSP)	LANNA J48 EMI CSN V140 MOL	
Houston George Bush Intcntl (IAH)	(non–advanced NAV only) LANNA J48 MOL J22 MEI AEX DAS-STAR or (Turbojets–GPS or DME/DME–IRU equipped) LANNA J48 MOL J22 MEI AEX TXMEX (RNAV)–STAR	
Houston Hobby (HOU)	(GPS or DME/DME–IRU equipped) LANNA J48 MOL J22 MEI AEX ROKIT (RNAV)–STAR or (non–advanced NAV only) LANNA J48 MOL J22 MEI AEX DAS–STAR	
Indianapolis (IND)	ELIOT J80 EMPTY DQN CLANG-STAR	
Ithaca (ITH)	(Turbojets) NEION J223 CORDS CFB V423	
Kansas City (MKC)	ELIOT J80 SPI BQS-STAR	
Knoxville (TYS)	LANNA J48 MOL J22	
Lewisburg (LWB)	LANNA J48 EMI CSN V140 MOL	
Lexington (LEX)	PARKE J6 HVQ	
Los Angeles (LAX)	ELIOT J80 MCI J24 SLN J102 ALS J44 RSK J64 PGS RIIVR-STAR	
Louisville (LOU, SDF)	PARKE J6 HVQ J6 YOCKY DARBY–STAR	
Marco Island (MKY)	(GPS or DME/DME–IRU equipped) BIGGY J75 GSO J75 DUNKN SHFTY (RNAV)–STAR	
Melbourne (MLB)	WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN BITHO-STAR	
Memphis (MEM)	PARKE LRP J6 BWG WLDER-STAR	
Miami (MIA)	(Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN HILEY (RNAV)–STAR or (Water–Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY KEMPR DIW AR22 JORAY HILEY (RNAV)–STAR or (Turbojets) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN ANNEY–STAR or (Water–Turbojets) WHITE J209 SBY KEMPR DIW AR22 JORAY OSOGY ENVOY YOSSI MILSY BOYUR HILEY KAINS or (Turboprops) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN ANNEY–STAR	
Milwaukee (MKE)	COATE J36 FNT MKG V2 SUDDS	
Minneapolis (MSP)	GAYEL J95 BUF YWT J63 TVC J522 GRB EAU–STAR	
Mobile (MOB)	BIGGY J75 GVE J37 MGM MVC V20 AXSIS	
Montgomery (MGM)	BIGGY J75 GVE J37	
Montreal (CYUL)	GREKI V419 JUDDS CAM J222 PLB PLB-STAR	
Naples (APF)	(Turbojets–GPS or DME/DME–IRU equipped) BIGGY J75 GSO J75 DUNKN SHFTY (RNAV)–STAR	
Nashville (BNA)	PARKE J6 YOCKY GUITR– STAR	
New Orleans (MSY)	LANNA J48 MOL J22 MEI J31	
Norfolk (ORF)	WHITE J209 SBY V1 CCV	
Orlando Executive (ORL)	(Turbojets) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN CORLL–STAR	1100–0300
	or (GPS or DME/DME–IRU equipped) WHITE J209 SBY KEMPR ILM AR15 HIBAC CWRLD (RNAV)–STAR	1100–0400

Terminals	Route	Effective Times (UTC)
Orlando Intl (MCO)	(Turbojets) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN BITHO–STAR	1100–0300
	or	
	(Water–Turbojets) WHITE J209 SBY KEMPR ILM AR15 HIBAC APOLO ORL	1100–0300
	or	
	(GPS or DME/DME–IRU equipped) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN CWRLD (RNAV)–STAR	1100–0400
	or	
	(GPS or DME/DME–IRU equipped) WHITE J209 SBY KEMPR ILM AR15 HIBAC CWRLD (RNAV)–STAR	1100–0400
Phoenix (PHX)	ELIOT J80 AIR J110 STL J19 ZUN FOSSL-STAR	
Pittsburgh (PIT)	ELIOT J80 VINSE NESTO–STAR	
Portland (PWM)	GREKI V419 JUDDS CAM CON CON067 PARSO	
Raleigh-Durham (RDU)	WHITE J209 CYN J37 J191 PXT PXT238 HPW025 HPW ARGAL-STAR	
Richmond (RIC)	WHITE J209 SBY V1 CCV HPW	
Roanoke (ROA)	LANNA J48 MOL	
Rochester (ROC)	(Turbojets) NEION J223 CORDS ULW V31 GIBBE	
	or	
	(Turboprops) COATE J36 CFB154 CFB V252 GIBBE	
Salt Lake City (SLC)	GAYEL J95 BUF J16 ECK J38 GRB ODI FSD J82 RAP J158 DDY J107 OCS OGD	
San Francisco (SFO)	GAYEL J95 BUF J16 ECK J38 GRB J106 GEP J70 ABR J32 FMA ILA PYE GOLDEN GATE–STAR	
Sarasota/Bradenton (SRQ)	BIGGY J75 TAY J85 GNV LAL	
Savannah (SAV)	(Turbojets) WHITE J209 SBY J79 CHS	
St. Louis (STL)	ELIOT J80 AIR J110 VHP VLA-STAR	
St. Petersburg (PIE)	BIGGY J75 TAY LZARD–STAR	
Syracuse (SYR)	(Turbojets) NEION J223 CORDS CFB V29	
	or	
	COATE J36 CFB154 CFB	
Tampa (TPA)	BIGGY J75 TAY LZARD–STAR	
	or	
	(GPS or DME/DME–IRU equipped) BIGGY J75 TAY DADES (RNAV)–STAR	
Toledo (TOL)	ELIOT J60 DJB VWV	
Toronto (CYYZ)	(Turbojets) GAYEL J95 BUF V36	
	or	
	(Turboprops) COATE J36 ULW141 ULW V36	
Tri-City (TRI)	LANNA J48 MOL J22 PSK V16 HMV	
Washington Dulles (IAD)	PARKE J6 LRP V143 MULRR AML	
Washington Natl (DCA)	BIGGY J75 MXE V378 BAL	
	or	
	(GPS or DME/DME–IRU equipped) BIGGY J75 MXE CLIPR (RNAV)–STAR	
West Palm Beach (PBI)	(Water–Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY KEMPR DIW AR19 AYBID FRWAY (RNAV)–STAR	
	or	
	(Turbojets–GSP or DME/DME–IRU equipped) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN FRWAY (RNAV)–STAR	
	or	
	(Turbojets) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN TUXXI–STAR	
	or	
	(Water–Turbojets) WHITE J209 SBY KEMPR DIW AR19 AYBID NEUBE SWOMP SANZZ CASKI	
Winston Salem (INT)	BIGGY J75 GSO	
Youngstown (YNG)	ELIOT J60 PSB PSB292	
From NEWARK SATELLITES only		
Akron (CAK)	ELIOT J60 PSB PSB292 YNG V72 ACO	

Terminals	Route	Effective Times (UTC)
Akron (AKR)	ELIOT J60 PSB PSB292060 YNG V72 ACO	
Allegheny County (AGC)	ELIOT J80 VINSE NESTO–STAR	
Augusta (AGS)	LANNA J48 ETX215 J75 GVE J37 SPA	1100–0300
Baltimore (BWI)	BIGGY J75 MXE V378 BAL	
Binghamton (BGM)	(Turbojets) NEION J223 CORDS CFB	
Birmingham (BHM)	LANNA J48 MOL J22 VXV VUZ	
Boca Raton (BCT)	(Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN CAYSL (RNAV)–STAR or (Water–Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY KEMPR DIW AR19 AYBID CAYSL (RNAV)–STAR or (Turbojets) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN TUXXI–STAR or (Water–Turbojets) WHITE J209 SBY KEMPR DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CAYSL	
Buffalo (BUF)	(Turbojets) NEION J223 CORDS ULW ULW306 V164 or (Turboprops) COATE J36 ULW141 ULW ULW306 V164	
Charleston (CHS)	(Turbojets) WHITE J209 SBY J79 KATZN TYI CHS	
Charleston (CRW)	PARKE J6 HVQ	
Charlotte (CLT)	LANNA J48 ETX215 J75 GVE LYH MAJIC-STAR	1100–0300
Charlottesville (CHO)	LANNA J48 ETX215 J75 GVE	
Chattanooga (CHA)	LANNA J48 MOL J22 VXV	
Chicago O'Hare (ORD)	COATE J36 FNT PAITN–STAR	0000–2359
Cincinnati (CVG)	(RNAV only) PARKE J6 COLNS GAVNN (RNAV)–STAR or (all others) PARKE J6 COLNS BRUSH–STAR	
Columbus (CMH)	ELIOT J80 AIR AIR260 BREMN	
Dallas/Fort Worth (DFW)	PARKE J6 LIT BYP	
Daytona Beach (DAB)	WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN	
Dekalb (Peachtree) (PDK)	LANNA J48 ODF AWSON-STAR	
Detroit Metro Wayne Co (DTW)	GAYEL J95 CFB CFB286 TRAAD ULW306 KOOPR YQO SPICA–STAR	
Detroit Satellites: Coleman A Young (DET), Windsor (CYQG), Pontiac (PTK), Willow Run (YIP), Ann Arbor (ARB)	GAYEL J95 CFB CFB286 TRAAD ULW306 KOOPR YQO	
Fayetteville (FAY)	LANNA J48 ETX215 J75 GVE SBV RDU	
Fort Lauderdale (FLL)	(Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN FISEL (RNAV)–STAR or (Water–Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY KEMPR ILM AR21 CRANS FISEL (RNAV)–STAR or (Turbojets) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN GISSH–STAR or (Water–Turbojets) WHITE J209 SBY KEMPR ILM AR21 CRANS HIILL FATHR GISSH–STAR or (Water–Turboprops–GPS or DME/DME–IRU equipped) WHITE J209 SBY KEMPR ILM AR21 CRANS FISEL (RNAV)–STAR	

Terminals	Route	Effective Times (UTC)
	(Turboprops) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN MLB BLUFI–STAR	
	or	
	(Water–Turboprops) WHITE J209 SBY KEMPR ILM AR21 CRANS HIILL FATHR (GISSH)–STAR	
Fort Myers (FMY, RSW)	(GPS or DME/DME–IRU equipped) LANNA J48 J53 SPA J85 AMG SHFTY (RNAV)–STAR	
	or	
	(WATER–Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY KEMPR WETRO ILM AR15 HIBAC SHFTY (RNAV)–STAR	
Fort Wayne (FWA)	ELIOT J80 SUZIE J64	
Greensboro (GSO)	LANNA J48 ETX215 J75 GVE LYH V222 HENBY	0000–2359
Greer (GSP)	LANNA J48 ETX215 J75 GVE J37 SPA	
Hot Springs (HSP)	LANNA J48 EMI CSN V140 MOL	
Houston George Bush Intcntl (IAH)	(non–advanced NAV only) LANNA J48 MOL J22 VUZ AEX DAS–STAR	
	or	
	(Turbojets–GPS or DME/DME–IRU equipped) LANNA J48 MOL J22 VUZ AEX TXMEX (RNAV)–STAR	
Houston Hobby (HOU)	(GPS or DME/DME–IRU equipped) LANNA J48 MOL J22 VUZ AEX ROKIT (RNAV)–STAR	
	or	
	(non–advanced NAV only) LANNA J48 MOL J22 VUZ AEX DAS–STAR	
Indianapolis (IND)	ELIOT J80 EMPTY DQN CLANG-STAR	
Ithaca (ITH)	(Turbojets) NEION J223 CORDS CFB V423	
Jacksonville (JAX)	(Turbojets) WHITE J209 SBY J79 KATZN TYI CHS SSI–STAR	
Lewisburg (LWB)	LANNA J48 EMI CSN V140 MOL	
Lexington (LEX)	PARKE J6 HVQ	
Los Angeles (LAX)	ELIOT J80 MCI J24 SLN J102 ALS J44 RSK J64 CIVET CIVET-STAR	
Louisville (LOU, SDF)	PARKE J6 HVQ J6 YOCKY DARBY–STAR	
Marco Island (MKY)	(GPS or DME/DME–IRU equipped) LANNA J48 J53 SPA J85 AMG SHFTY (RNAV)–STAR	
Melbourne (MLB)	WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN BITHO-STAR	
Miami (MIA)	(Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN HILEY (RNAV)–STAR	
	or	
	(Water–Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY KEMPR DIW AR22 JORAY HILEY (RNAV)–STAR	
	or	
	(Turbojets) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN ANNEY–STAR	
	or	
	(Water–Turbojets) WHITE J209 SBY KEMPR DIW AR22 JORAY OSOGY ENVOY YOSSI MILSY BOYUR HILEY KAINS	
	or	
	(Turboprops) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN ANNEY–STAR	
Milwaukee (MKE)	COATE J36 FNT MKG V2 SUDDS	
Minneapolis (MSP)	GAYEL J95 BUF YWT J63 TVC J522 GRB EAU-STAR	
Mobile (MOB)	LANNA J48 J53 SPA J37 MGM MVC V20 AXSIS	
Montgomery (MGM)	LANNA J48 J53 SPA J37	
Montreal (CYUL)	GREKI V419 JUDDS CAM J222 PLB V91 NAPEE	
Naples (APF)	(Turbojets–GPS or DME/DME–IRU equipped) LANNA J48 J53 SPA J85 AMG SHFTY (RNAV)–STAR	
Nashville (BNA)	PARKE J6 YOCKY GUITR-STAR	

Terminals	Route	Effective Times (UTC)
Norfolk (ORF)	WHITE J209 SBY V1 CCV	
Orlando Executive (ORL)	(Turbojets) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN CORLL–STAR	1100–0300
Orlando Intl (MCO)	(Turbojets) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN BITHO–STAR	1100–0300
	or	
	(Water–Turbojets) WHITE J209 SBY KEMPR ILM AR15 HIBAC APOLO ORL	1100–0300
Phoenix (PHX)	ELIOT J80 AIR J110 STL J19 ZUN FOSSL-STAR	
Portland (PWM)	GREKI V419 JUDDS CAM CON CON067 PARSO	
Richmond (RIC)	WHITE J209 SBY V1 CCV HPW	
Roanoke (ROA)	LANNA J48 MOL	
Rochester (ROC)	(Turbojets) NEION J223 CORDS ULW V31 GIBBE	
	or	
	(Turboprops) COATE J36 CFB154 CFB V252 GIBBE	
Salt Lake City (SLC)	GAYEL J95 BUF J16 ECK J38 GRB ODI FSD J82 RAP J158 DDY J107 OCS OGD	
Savannah (SAV)	(Turbojets) WHITE J209 SBY J79 CHS	
St. Petersburg (PIE)	LANNA J48 J53 SPA J85 TAY LZARD–STAR	
Syracuse (SYR)	(Turbojets) NEION J223 CORDS CFB V29	
	or	
	(Turboprops) COATE J36 CFB154 CFB	
Tampa (TPA)	LANNA J48 J53 SPA J85 TAY LZARD–STAR	
	or	
	(GPS or DME/DME–IRU equipped) LANNA J48 J53 SPA J85 TAY DADES (RNAV)–STAR	
Toledo (TOL)	ELIOT J60 DJB VWV	
Toronto (CYYZ)	(Turbojets) GAYEL J95 BUF V36	
	or	
	(Turboprops) COATE J36 ULW141 ULW V36	
Tri-City (TRI)	LANNA J48 MOL J22 PSK V16 HMV	
Washington Dulles (IAD)	PARKE J6 LRP V143 MULRR AML	
Washington Natl (DCA)	BIGGY J75 MXE V378 BAL	
West Palm Beach (PBI)	(Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN FRWAY–STAR	
	or	
	(Water–Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY KEMPR DIW AR19 AYBID FRWAY (RNAV)–STAR	
	or	
	(Turbojets) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN TUXXI–STAR	
	or	
	(Water–Turbojets) WHITE J209 SBY KEMPR DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CASKI	
Winston Salem (INT)	BIGGY J75 GSO	
Youngstown (YNG)	ELIOT J60 PSB PSB292060	
FROM TETERBORO (TEB) only		
Boca Raton (BCT)	(Water–Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY KEMPR DIW AR19 AYBID CAYSL (RNAV)–STAR	
	or	
	(Water–Turbojets) WHITE J209 SBY KEMPR DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CAYSL	
	or	
	(Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN CAYSL (RNAV)–STAR	
	or	
	(Turbojets) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN TUXXI–STAR	
Charleston (CHS)	(Turbojets) WHITE J209 SBY J79 KATZN TYI CHS	

Terminals	Route	Effective Times (UTC)
Cincinnati (CVG)	(RNAV only) PARKE J6 COLNS GAVNN (RNAV)–STAR	
	or	
	(all others) PARKE J6 COLNS BRUSH–STAR	
Detroit Satellites: Coleman A Young (DET), Pontiac (PTK), Windsor (CYQG), Ann Arbor (ARB), Willow Run (YIP)	GAYEL J95 BUF J547 YXU PICES–STAR	
	or	
	GAYEL J95 BUF J547 YXU GOHMA–STAR	1100–0300
	or	
	GAYEL J95 BUF J547 YXU SWWAN–STAR	1100–0300
	or	
	ELIOT J60 PSB LLEEO–STAR	
Ft. Lauderdale (FLL, OPF)	(Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN FISEL (RNAV)–STAR	
	or	
	(Turbojets) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN GISSH–STAR	
	or	
	(Turboprops) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN MLB BLUFI–STAR	
	or	
	(Water–Turboprops) WHITE J209 ORF J174 ILM AR21 CRANS HIILL FATHR GISSH–STAR	
	or	
	(Water–Turboprops–GPS or DME/DME–IRU equipped) WHITE J209 ORF J174 ILM AR21 CRANS FISEL (RNAV)–STAR	
	or	
	(Water–Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY KEMPR ILM AR21 CRANS FISEL (RNAV)–STAR	
	or	
	(Water–Turbojets) WHITE J209 SBY KEMPR ILM AR21 CRANS FATHR GISSH–STAR	
Jacksonville (JAX)	(Turbojets) WHITE J209 SBY J79 CHS SSI–STAR	
Marco Isle (MKY)	(Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY KEMPR ILM AR15 HIBAC SHFTY (RNAV)–STAR	
Miami (MIA, TMB, HST)	(Water–Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY KEMPR DIW AR22 JORAY HILEY (RNAV)–STAR	
	or	
	(Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN HILEY (RNAV)–STAR	
	or	
	(Turbojets) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN ANNEY–STAR	
	or	
	(Water–Turbojets) WHITE J209 SBY KEMPR DIW AR22 JORAY OSOGY ENVOY YOSSI MILSY BOYUR HILEY KAINS	
	or	
	(Turboprops) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN ANNEY–STAR	
Naples (APF)	(Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY KEMPR ILM AR15 HIBAC SHFTY (RNAV)–STAR	
Orlando Intl (MCO)	(Turbojets) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN BITHO–STAR	1100–0300
	or	

Terminals	Route	Effective Times (UTC)
	(GPS or DME/DME–IRU equipped) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN CWRLD (RNAV)–STAR	1100–0400
	or	
	(GPS or DME/DME–IRU equipped) WHITE J209 SBY KEMPR ILM AR15 HIBAC CWRLD (RNAV)–STAR	1100–0400
Orlando/Exec (ORL)	(Turbojets) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN CORLL–STAR	1100–0300
	or	
	(Water–Turbojets) WHITE J209 SBY KEMPR ILM AR15 HIBAC APOLO ORL	
	or	
	(GPS or DME/DME–IRU equipped) WHITE J209 SBY KEMPR ILM AR15 HIBAC CWRLD (RNAV)–STAR	1100–0400
Savannah (SAV)	(Turbojets) WHITE J209 SBY J79 CHS	
West Palm Beach (PBI)	(Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN FRWAY (RNAV)–STAR	
	or	
	(Turbojets) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN TUXXI–STAR	
	or	
	(Water–Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY KEMPR DIW AR19 AYBID FRWAY (RNAV)–STAR	
	or	
	(Water–Turbojets) WHITE J209 SBY KEMPR DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CASKI	
FROM WHITE PLAINS (HPN)		
Allegheny (AGC)	ELIOT J80 VINSE NESTO–STAR	
Atlanta (ATL)	LANNA J48 ODF WHINZ–STAR	
	or	
	(RNAV only) LANNA J48 ODF FLCON (RNAV)–STAR	
Baltimore (BWI)	BIGGY J75 MXE V378 BAL	
Binghamton (BGM)	(Turbojets) NEION J223 CORDS CFB	
Boca Raton (BCT)	(Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN CAYSL (RNAV)–STAR	
	or	
	(Turbojets) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN TUXXI–STAR	
	or	
	(Water–Turbojets–GPS or DME/DME–IRU equipped) WAVEY EMJAY J174 SWL CEBEE WETRO DIW AR19 AYBID CAYSL (RNAV)–STAR	
	or	
	(Water) WAVEY EMJAY J174 SWL CEBEE WETRO DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CAYSL	
Boston (BOS)	MERIT ORW ORW–STAR	
Buffalo (BUF)	(Turbojets) NEION J223 CORDS ULW ULW306 V164	
	or	
	(Turboprops) GAYEL J95 CFB V270 ULW306 V164	
Burlington (BTV)	GREKI V419 JUDDS CAM	
Charleston (CHS)	(Turbojets) WHITE J209 SBY J79 KATZN TYI CHS	
Charleston (CRW)	PARKE J6 HVQ	
Charlotte (CLT)	BIGGY J75 GVE LYH MAJIC–STAR	
Chicago Midway (MDW)	ELIOT J60 GSH GSH–STAR	
Chicago O'Hare (ORD)	COATE J36 FNT PAITN–STAR	0000–2359

Terminals	Route	Effective Times (UTC)
Cincinnati (CVG)	(RNAV only) PARKE J6 COLNS GAVNN (RNAV)–STAR or (all others) PARKE J6 COLNS BRUSH–STAR	
Cleveland (CLE)	ELIOT J60 PSB PSB292 YNG CXR	
Columbus (CMH)	ELIOT J80 AIR AIR260 BREMN	
Dallas/Ft Worth (DFW)	PARKE J6 LIT BYP	
Dayton (DAY)	ELIOT J80 AIR APE DANEI–STAR	
Daytona Beach (DAB)	WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN	
Denver (DEN)	ELIOT J60 IOW J10 LBF SAYGE–STAR	
Detroit Metro–Wayne Co (DTW)	GAYEL J95 CFB CFB286 TRAAD ULW306 KOOPR YQO SPICA–STAR	
Detroit Satellites: Coleman A Young (DET), Pontiac (PTK), Windsor (CYQG), Willow Run (YIP), Ann Arbor (ARB)	GAYEL J95 CFB CFB286 TRAAD ULW306 KOOPR YQG	
Fayetteville (FAY)	BIGGY J75 GVE SBV RDU	
Fort Lauderdale (FLL, FXE, OPF)	(Turbojets–All Others) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN GISSH–STAR or (Turbojets)–/E,/G,/R,/J,/L,/Q equipped) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN FISEL (RNAV)–STAR or (Turboprops) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN MLB BLUFI–STAR or (Water–Turboprops–/E,/G,/R,/J,/L,/Q equipped) WHITE J209 SBY KEMPR ILM AR21 CRANS FISEL (RNAV)–STAR	
Fort Myers (FMY, RSW)	(GPS or DME/DME–IRU equipped) BIGGY J75 GSO J75 DUNKN SHFTY (RNAV)–STAR	
Fort Wayne (FWA)	ELIOT J80 SUZIE J64	
Greensboro (GSO)	BIGGY J75	
Greer (GSP)	BIGGY J75 GVE J37 SPA	
Hot Springs (HSP)	LANNA J48 EMI CSN V140 MOL	
Houston George Bush Intrcntl (IAH)	(non–advanced NAV only) LANNA J48 MOL J22 VUZ AEX DAS–STAR or (Turbojets–GPS or DME/DME–IRU equipped) LANNA J48 MOL J22 VUZ AEX TXMEX (RNAV)–STAR	
Houston Hobby (HOU)	(GPS or DME/DME–IRU equipped) LANNA J48 MOL J22 VUZ AEX ROKIT (RNAV)–STAR or (non–advanced NAV only) LANNA J48 MOL J22 VUZ AEX DAS–STAR	
Indianapolis (IND)	ELIOT J80 EMPTY DQN CLANG–STAR	
Ithaca (ITH)	(Turbojets) NEION J223 CORDS CFB V423	
Jacksonville (JAX)	(Turbojets) WHITE J209 SBY J79 CHS SSI–STAR	
Lewisburg (LWB)	LANNA J48 EMI CSN V140 MOL	
Lexington (LEX)	PARKE J6 HVQ	
Los Angeles (LAX)	ELIOT J80 MCI J24 SLN J102 ALS J44 RSK J64 PGS RIIVR–STAR	
Louisville (SDF)	PARKE J6 HVQ J6 YOCKY DARBY–STAR	
Marco Island (MKY)	(GPS or DME/DME–IRU equipped) BIGGY J75 GSO J75 DUNKN SHFTY (RNAV)–STAR or (Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY KEMPR ILM AR15 HIBAC SHFTY (RNAV)–STAR	
Melbourne (MLB)	WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN BITHO–STAR	
Memphis (MEM)	PARKE J6 BWG WLDER–STAR	

Terminals	Route	Effective Times (UTC)
Miami (MIA, TMB, HST)	(Water–Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY KEMPR DIW AR22 JORAY HILEY (RNAV)–STAR	
	or	
	(Turbojets–GPS of DME/DME–IRU equipped) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN HILEY (RNAV)–STAR	
	or	
	(Turbojets) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN ANNEY–STAR	
	or	
	(Turboprops) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN ANNEY–STAR	
	or	
	(Water–Turbojets) WHITE J209 SBY KEMPR DIW AR22 JORAY OSOGY ENVOY YOSSI MILSY BOYUR HILEY KAINS	
Milwaukee (MKE)	COATE J36 FNT MKG V2 SUDDS	
Minneapolis (MSP)	GAYEL J95 BUF YWT J63 TVC J522 GRB EAU–STAR	
Mobile (MOB)	BIGGY J75 GVE J37 MGM MVC V20 AXSIS	
Montgomery (MGM)	BIGGY J75 GVE J37	
Montreal (CYUL)	GREKI V419 JUDDS CAM J222 PLB PLB–STAR	
Naples (APF)	(Turbojets–GPS or DME/DME–IRU equipped) BIGGY J75 GSO J75 DUNKN SHFTY (RNAV)–STAR	
	or	
	(Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY KEMPR ILM AR15 HIBAC SHFTY (RNAV)–STAR	
Nashville (BNA)	PARKE J6 YOCKY GUITR–STAR	
Norfolk (ORF)	WHITE J209 SBY V1 CCV	
Orlando Exec (ORL)	(Turbojets) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN CORLL–STAR	
	or	
	(GPS or DME/DME–IRU equipped) WHITE J209 SBY KEMPR ILM AR15 HIBAC CWRLD (RNAV)–STAR	1100–0400
Orlando Intl (MCO)	(Turbojets) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN BITHO–STAR	
	or	
	(Water–Turbojets) WHITE J209 SBY KEMPR ILM AR15 HIBAC APOLO ORL	
	or	
	(GPS or DME/DME–IRU equipped) WHITE J209 SBY J79 KATZN J193 J121 CHS J79 OMN CWRLD (RNAV)–STAR	1100–0400
	or	
	(GPS or DME/DME–IRU equipped) WHITE J209 SBY KEMPR ILM AR15 HIBAC CWRLD (RNAV)–STAR	1100–0400
Phoenix (PHX)	ELIOT J80 AIR J110 STL J19 ZUN FOSSL–STAR	
Portland (PWM)	GREKI V419 JUDDS CAM CON CON067 PARSO	
Richmond (RIC)	WHITE J209 SBY V1 CCV HPW	
Rochester (ROC)	(Turbojets) NEION J223 CORDS ULW V31 GIBBE	
Salt Lake City (SLC)	GAYEL J95 BUF J16 ECK J16 BAE DBQ J94 OCS OGD	
Savannah (SAV)	(Turbojets) WHITE J209 SBY J79 CHS	
St. Louis (STL)	ELIOT J80 AIR J110 VHP VLA–STAR	
St. Petersburg (PIE)	BIGGY J75 TAY LZARD–STAR	
Syracuse (SYR)	(Turbojets) NEION J223 CORDS CFB V29	
Tampa (TPA)	BIGGY J75 TAY LZARD–STAR	
	or	
	(GPS or DME/DME–IRU equipped) BIGGY J75 TAY DADES (RNAV)–STAR	
Toledo (TOL)	ELIOT J60 DJB VWV	

Terminals	Route	Effective Times (UTC)
Toronto (CYYZ)	GAYEL J95 BUF V36	
Tri City (TRI)	LANNA J48 MOL J22 PSK V16 HMV	
Washington Dulles (IAD)	PARKE J6 LRP V143 MULRR AML	
Washington Natl (DCA)	BIGGY J75 MXE V378 BAL or (GPS or DME/DME–IRU equipped) BIGGY J75 MXE CLIPR (RNAV)–STAR	
West Palm Beach (PBI)	(Water–Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY KEMPR DIW AR19 AYBID FRWAY (RNAV)–STAR or (Turbojets–GPS or DME/DME–IRU equipped) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN FRWAY–STAR or (Turbojets) WHITE J209 SBY J79 KATZN ISO J121 CHS J79 OMN TUXXI–STAR or (Water–Turbojets) WHITE J209 SBY KEMPR DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CASKI	
Winston/Salem (INT)	BIGGY J75 GSO	
Youngstown (YNG)	ELIOT J60 PSB PSB292060	
NORFOLK (ORF)		
Chicago O'Hare (ORD)	MOL GEFFS J149 FWA KNOX–STAR or MOL GEFFS J149 ROD WATSN (RNAV)–STAR	
Cincinnati (CVG)	(at or above FL240) WAIKS ORF290 KELLE MOL130 MOL HNN090/50 HNN BRUSH–STAR or (at or below FL220) WAIKS ORF290 KELLE MOL130 MOL HNN BRUSH–STAR or (RNAV only–at or above FL240) WAIKS KELLE MOL HNN090/50 HNN GAVNN (RNAV)–STAR or (RNAV only–at or below FL220) WAIKS KELLE MOL HNN GAVNN (RNAV)–STAR	
Detroit Metro Wayne Co (DTW)	WAIKS ORF290 KELLE MOL130 MOL GEMNI–STAR	
Houston George Bush Intcntl (IAH)	(Turbojets–GPS or DME/DME–IRU equipped) VUZ AEX TXMEX (RNAV)–STAR or (non–advanced NAV only) VUZ AEX DAS–STAR	
Houston Hobby (HOU)	(GPS or DME/DME–IRU equipped) VUZ AEX ROKIT (RNAV)–STAR or (non–advanced NAV only) VUZ AEX DAS–STAR	
Islip (ISP)	SCHOL SBY200 J121 SARDI CCC	1100–0400
Kennedy (JFK)	SCHOL SBY 200 J121 SIE CAMRN–STAR	1100–0400
La Guardia (LGA)	HPW V213 PXT KORRY–STAR	1100–0300
Newark (EWR)	HPW HPW025 J14 PXT DYLIN-STAR or (GPS or DME/DME–IRU equipped) HPW HPW025 J14 PXT PHLBO (RNAV)–STAR	
Philadelphia (PHL)	SCHOL SBY200 V139 RADDS VCN–STAR	1100–0400
Teterboro (TEB)	HPW V213 PXT JAIKE–STAR or (non advanced navigation, turbojets only) WAIKS ORF290079 FAK BRV AML J227 J49 J70 LVZ LVZ–STAR	1100–0300 1100–0300
PHILADELPHIA METRO AREA (PHL, PNE)		
Albany (ALB)	DITCH J225 JFK244016 LGA LGA055 V487 CANAN V130	
Atlanta (ATL)	MXE MXE278 PENSY J48 ODF WHINZ–STAR	

Terminals	Route	Effective Times (UTC)
	or	
	(RNAV only) MXE MXE278 PENSY J48 ODF FLCON (RNAV)–STAR	
Boca Raton (BCT)	(Turbojets–/E,/G,/R,/J,/L,/Q equipped) OOD TEBEE HAYDO SBY J79 KATZN ISO J121 CHS J79 OMN CAYSL (RNAV)–STAR	
	or	
	(Turbojets–All Others) OOD TEBEE HAYDO SBY J79 KATZN ISO J121 CHS J79 OMN TUXXI–STAR	
	or	
	(Water–Turbojets–/E,/G,/R,/J,/L,/Q equipped) OOD TEBEE HAYDO SBY J209 ORF KEMPR DIW AR19 AYBID CAYSL (RNAV)–STAR	
	or	
	(Water–Turbojets–All Others) OOD TEBEE HAYDO SBY J209 ORF KEMPR DIW AR19 AYBID NEUBE SWOMP SANZZ CAYSL (RNAV)–STAR	
Boston (BOS)	DITCH J225 JFK ORW–STAR	
Buffalo (BUF)	PTW PTW320 J64 RAV RAV312 BUF162	
Burlington (BTV)	DITCH J225 JFK J222 CAM	
Charleston (CHS)	(Turbojets) OOD TEBEE HAYDO SBY J79 CHS	
Charlotte (CLT)	MXE J75 GVE LYH MAJIC-STAR	
Chicago Midway (MDW)	PTW PTW320 SARAA RAV PSB J60 GSH GSH-STAR	
Chicago O'Hare (ORD)	PTW PTW320 J64 FWA OXI-STAR	0000–2359
	or	
	(GPS OR DME/DME–IRU equipped) PTW PTW320 SARMA J64 MAINE ZANLA WATSN (RNAV)–STAR	
Cincinnati (CVG)	(RNAV only) MXE PENSY J110 FLIRT J6 COLNS GAVNN (RNAV)–STAR	
	or	
	(all others) MXE PENSY J110 FLIRT J6 COLNS BRUSH–STAR	
Cleveland (CLE)	PTW PTW320 J64 RAV PSB PSB292 YNG CXR	
Columbus (CMH)	MXE MXE278 PENSY J110 AIR BREMN–STAR	
Dallas/Fort Worth (DFW)	MXE MXE278 PENSY J110 FLIRT J6 LIT BONHAM–STAR	
Dayton (DAY)	MXE MXE278 PENSY J110 AIR APE DANEI–STAR	
Denver (DEN)	PTW PTW320 J64 RAV PSB J60 IOW J10 LBF SAYGE–STAR	
Detroit Metro–Wayne Co (DTW)	MXE MXE278 PENSY J110 LEJOY J518 DJB GEMNI–STAR	
Detroit Satellites:		
Coleman A Young (DET), Windsor (CYQG), Pontiac (PTK)	PTW PTW320 J64 RAV PSB LLEEO–STAR	
Willow Run (YIP)	PTW PTW320 J64 RAV PSB ERI	
Fort Lauderdale (FLL)	(Water–Turboprops–GPS or DME/DME–IRU equipped) OOD TEBEE HAYDO SBY KEMPR ILM AR21 CRANS FISEL (RNAV)–STAR	
	or	
	(Turbojets–GPS or DME/DME–IRU equipped) OOD TEBEE HAYDO SBY J79 KATZN ISO J121 CHS J79 OMN FISEL (RNAV)–STAR	
	or	
	(Water–Turbojets–GPS or DME/DME–IRU equipped) OOD TEBEE HAYDO SBY KEMPR ILM AR21 CRANS FISEL (RNAV)–STAR	
	or	
	(Turbojets) OOD TEBEE HAYDO SBY J79 KATZN ISO J121 CHS J79 OMN GISSH–STAR	
	or	
	(Water–Turboprops) OOD TEBEE HAYDO SBY KEMPR ILM AR21 CRANS HIILL FATHR GISSH–STAR	

Terminals	Route	Effective Times (UTC)
	or	
	(Water–Turbojets) OOD TEBEE HAYDO SBY KEMPR ILM AR21 CRANS HIILL FATHR GISSH–STAR	
	or	
	(Turboprops) OOD TEBEE HAYDO SBY J79 KATZN J193 J121 CHS J79 OMN MLB BLUFI–STAR	
Fort Myers (FMY, RSW)	(GPS or DME/DME–IRU equipped) MXE J75 GSO J75 DUNKN SHFTY (RNAV)–STAR	
	or	
	(WATER–Turbojets) OOD TEBEE HAYDO SBY KEMP ILM AR15 HIBAC SHFTY (RNAV)–STAR	
Greensboro (GSO)	MXE J75 GVE LYH V222 HENBY	0000–2359
Hot Springs (HSP)	MXE MXE278 PENSY J48 MOL	
Houston George Bush Intrcntl (IAH)	(non–advanced NAV only) MXE MXE278 PENSY J48 MOL J22 VUZ AEX DAS–STAR	
	or	
	(Turbojets–GPS or DME/DME–IRU equipped) MXE MXE278 PENSY J48 MOL J22 VUZ AEX TEXMX (RNAV)–STAR	
Houston Hobby (HOU)	(GPS or DME/DME–IRU equipped) MXE MXE278 PENSY J48 MOL J22 VUZ AEX ROKIT (RNAV)–STAR	
	or	
	(non–advanced NAV only) MXE MXE278 PENSY J48 MOL J22 VUZ AEX DAS–STAR	
Indianapolis (IND)	MXE MXE278 PENSY J110 AIR J80 EMPTY DQN CLANG-STAR	
Jacksonville (JAX)	(Turbojets) OOD TEBEE HAYDO SBY J79 CHS SSI–STAR	
Kansas City (MKC)	MXE MXE278 J110 AIR J80 SPI BRAYMER–STAR	
Knoxville (TYS)	MXE MXE278 PENSY J48 MOL J22	
Lewisburg (LWB)	MXE MXE278 PENSY J48 MOL V140 COVEY	
Lexington (LEX)	MXE MXE278 PENSY J110 LEJOY HVQ	
Louisville (SDF)	MXE MXE278 PENSY J110 FLIRT J6 YOCKY DARBY–STAR	
Manchester (MHT)	DITCH J225 JFK J37 ALB EEN MHT	
Marco Island (MKY)	(GPS or DME/DME–IRU equipped) MXE J75 GSO J75 DUNKN SHFTY (RNAV)–STAR	
Memphis (MEM)	MXE MXE278 PENSY J110 FLIRT J6 BWG WLDER–STAR	
Miami (MIA)	(Water–Turbojets) OOD TEBEE HAYDO SBY KEMPR DIW AR22 JORAY OSOGY ENVOY YOSSI MILSY BOYUR HILEY KAINS	
	or	
	(Water–GPS or DME/DME–IRU equipped) OOD TEBEE HAYDO SBY KEMPR DIW AR22 JORAY HILEY (RNAV)–STAR	
	or	
	(Turbojets) OOD TEBEE HAYDO SBY J79 KATZN ISO J121 CHS J79 OMN ANNEY–STAR	
	or	
	(Turbojets–GPS or DME/DME–IRU equipped) OOD TEBEE HAYDO SBY J79 KATZN ISO J121 CHS J79 OMN HILEY (RNAV)–STAR	
	or	
	(Turboprops) OOD TEBEE HAYDO SBY J79 KATZN J193 J121 CHS J79 OMN ANNEY–STAR	
Milwaukee (MKE)	PTW PTW320 J64 RAV PSB J60 DJB J34 J70 PMM V170 BRAVE	
Minneapolis (MSP)	PTW PTW320 J64 RAV PSB J60 DJB J34 BAE EAU-STAR	
Montreal (CYUL)	DITCH J225 JFK J222 PLB PLB-STAR	
Naples (APF)	(Turbojets–GPS or DME/DME–IRU equipped) MXE J75 GSO J75 DUNKN SHFTY (RNAV)–STAR	

Terminals	Route	Effective Times (UTC)
Nashville (BNA)	MXE MXE278 PENSY J110 FLIRT J6 YOCKY GUITR-STAR	
New Orleans (MSY)	MXE MXE278 PENSY J48 MOL J22 MEI RYTHM–STAR	
Newport News (PHF)	OOD OOD198 SBY018 SBY VI CCV	
Orlando Executive (ORL)	OOD OOD198 SBY018 SBY J79 KATZN J193 J121 CHS J79 OMN CORLL–STAR	1100–0300
Orlando Intl (MCO)	OOD OOD198 SBY018 SBY J79 KATZN J193 J121 CHS J79 OMN BITHO–STAR	1100–0300
	or	
	(Water–Turbojets) OOD TEBEE HAYDO SBY KEMPR ILM AR15 HIBAC APOLO ORL	
	or	
	(GPS or DME/DME–IRU equipped) OOD OOD198 SBY018 SBY J79 KATZN J193 J121 CHS J79 OMN CWRLD (RNAV)–STAR	1100–0400
	or	
	(GPS or DME/DME–IRU equipped) OOD TEBEE HAYDO SBY KEMPR ILM AR15 HIBAC CWRLD (RNAV)–STAR	1100–0400
Pittsburgh (PIT)	MXE MXE278 PENSY J110 VINSE NESTO–STAR	
Portland (PWM)	DITCH V312 DRIFT CCC BOS BOS048 MESHL	1100–0300
Providence (PVD)	DITCH V312 DRIFT J121 HTO JORDN–STAR	
	or	
	(Turbojet, NonAdvanced Navigation) DITCH V312 DRIFT J121 HTO V268 MINNK	
Raleigh/Durham (RDU)	OOD OOD198 SBY018 SBY ARGAL–STAR	
Richmond (RIC)	OOD OOD198 SBY018 SBY V1 CCV HPW	
Roanoke (ROA)	MXE MXE278 PENSY J48 MOL	
Rochester (ROC)	PTW PTW320 J64 RAV RAV312 J227 ULW V31 GIBBE	
San Francisco (SFO)	PTW PTW320 J64 HLC J80 OAL MOD-STAR	
Sarasota/Bradenton (SRQ)	MXE J75 TAY J85 GNV GNV174055 LAL	
Savannah (SAV)	ODD TEBEE HAYDO SBY J79 CHS	
St. Louis (STL)	MXE MXE278 PENSY J110 VHP VLA-STAR	
St. Petersburg (PIE)	MXE J75 TAY LZARD–STAR	
Tampa (TPA)	MXE J75 TAY LZARD–STAR	
	or	
	(GPS or DME/DME–IRU equipped) MXE J75 TAY DADES (RNAV)–STAR	
Toronto (CYYZ)	PTW PTW320 J64 RAV PSB J61 BUF V36	
West Palm Beach (PBI)	(Turbojets–GPS or DME/DME–IRU equipped) OOD TEBEE HAYDO SBY J79 KATZN J193 J121 CHS J79 OMN FRWAY (RNAV)–STAR	
	or	
	(Turbojets) OOD TEBEE HAYDO SBY J79 KATZN ISO J121 CHS J79 OMN TUXXI–STAR	
	or	
	(Water–Turbojets GPS or DME/DME–IRU equipped) OOD TEBEE HAYDO SBY KEMPR DIW AR19 AYBID FRWAY (RNAV)–STAR	
	or	
	(Water–Turbojets) OOD TEBEE HAYDO SBY KEMPR DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CASKI	
White Plains (HPN)	DITCH V312 CYN BOUNO–STAR	
Windsor Locks (BDL)	DITCH J225 JFK DPK DPK–STAR	
PITTSBURGH (PIT)		
Albany (ALB)	EWC EWC050 J584 SLT RKA RKA099 V449	
Boston (BOS)	EWC EWC050 J584 SLT J190 ALB GDM GDM-STAR	
Buffalo (BUF)	EWC EWC038 EWC038060 DKK BUF	
Chicago Midway (MDW)	BSV BSV297 MAYZE J60 GSH GSH-STAR	
Chicago O'Hare (ORD)	BSV BSV286 OXI095 OXI OXI-STAR	1100–0300
	or	
	BSV ZANLA WATSN (RNAV)–STAR	

Terminals	Route	Effective Times (UTC)
Fort Lauderdale (FLL)	(/E, /G, /R, /J, /L, /Q) CKB CKB197 PSK014 PSK CAE SAV J103 OMN FISEL (RNAV)–STAR or (all others) CKB CKB197 PSK014 PSK CAE SAV J103 OMN GISSH–STAR	
Houston George Bush Intrcntl (IAH)	(Turbojets–GPS or DME/DME–IRU equipped) LIT J180 SWB TXMEX (RNAV)–STAR or (non–advanced NAV only) LIT J180 SWB DAS–STAR	
Houston Hobby (HOU)	(GPS or DME/DME–IRU equipped) LIT J180 SWB ROKIT (RNAV)–STAR or (non–advanced NAV only) LIT J180 SWB DAS–STAR	
Islip (ISP)	EWC EWC050 J584 SLT J190 CFB HNK J68 V130 ORW V308 BOROS CCC	
Kennedy (JFK)	EWC EWC050 J584 SLT J190 J70 LVZ LENDY-STAR	
La Guardia (LGA)	TON PSB MIP-STAR	
Miami (MIA)	(/E, /G, /R, /J, /L, /Q) CKB CKB197 PSK014 PSK CAE SAV J103 OMN HILEY (RNAV)–STAR or (all others) CKB CKB197 PSK014 CAE SAV J103 OMN ANNEY–STAR	
Newark (EWR)	EWC EWC050 J584 SLT FQM-STAR	
Philadelphia (PHL)	JST J152 HAR V210 BUNTS	
Tampa (TPA)	CKB197 PSK014 PSK CAE J75 TAY LZARD–STAR or (GPS or DME/DME–IRU equipped) CKB197 PSK014 PSK CAE J75 TAY DADES (RNAV)–STAR	
White Plains (HPN)	(Above 250 kts) EWC EWC050 J584 SLT J190 CFB DNY280 DNY VALRE-STAR or (250 kts or less) EWC EWC050 J584 SLT J190 CFB DNY280 DNY NOBBI-STAR	
Windsor Locks (BDL)	EWC EWC050 J584 SLT RKA SWEDE–STAR	
PORTLAND (PWM)		
Chicago O'Hare (ORD)	CAM SYR J63 EHMAN YXU J547 FNT PAITN-STAR	1100–0300
Cincinnati (CVG)	(RNAV only) ENE J547 SYR JOSSY MAULL KODIE CTW TIGRR (RNAV)–STAR or (all others) ENE J547 SYR J29 KELIE SLT016 SLT SLT249 KODIE CTW081 CTW CINCE–STAR	
La Guardia (LGA)	CON CAM ALB PWL IGN V157	1100–0300
Newark (EWR)	CON CAM ALB V213 SAX	1100–0300
Philadelphia (PHL)	PSM WITCH CCC SHERL J121 BRIGS VCN-STAR	1100–0300
Pittsburgh (PIT)	CAM ALB J49 HNK HNK271 J190 SLT GRACE–STAR	1100–0300
Washington Dulles (IAD)	PSM WITCH GLYDE BAF J77 SAX J6 LRP DELRO–STAR	1100–0300
PROVIDENCE (PVD)		
Atlanta (ATL)	PUT BAF J77 PTW J48 ODF WHINZ–STAR or (RNAV only) PUT BAF J77 PTW J48 ODF FLCON (RNAV)–STAR	1100–0300 1100–0300
Baltimore (BWI)	PUT PUT283 NELIE CMK J75 MXE V378 BAL	1100–0300
Boca Raton (BCT)	(Turbojets–GPS or DME/DME–IRU equipped) PVD180 JUMPR MVY260 RIFLE J174 ORF ISO J121 CHS J79 OMN CAYSL (RNAV)–STAR or (Turbojets) PVD180 JUMPR MVY260 RIFLE J174 ORF ISO J121 CHS J79 OMN TUXXI–STAR	

Terminals	Route	Effective Times (UTC)
	or (Water–GPS or DME/DME–IRU equipped) PVD180 JUMPR MVY260 J174 SWL CEBEE WETRO DIW AR19 AYBID CAYSL (RNAV)–STAR or (Water–Turbojets) PVD180 JUMPR MVY260 J174 SWL CEBEE WETRO DIW AR19 AYBID NEUBE SWOMP SANZZ CAYSL (RNAV)–STAR	
Chicago O'Hare (ORD)	PUT CTR CAM SYR J63 EHMAN YXU J547 FNT PAITN-STAR	1100–0300
Cincinnati (CVG)	(RNAV only) CTR HNK J49 PSB MAULL KODIE CTW TIGRR (RNAV)–STAR or (all others) CTR HNK J49 PSB PSB281 MAULL SLT249 KODIE CTW081 CTW CINCE–STAR	
Detroit Metro-Wayne Co (DTW)	PUT CTR CAM SYR J547 BUF YQO SPICA–STAR	1100–0300
Detroit Satellites: Coleman A Young (DET), Windsor (CYQG), Pontiac (PTK), Willow Run (YIP), Ann Arbor (ARB)	PUT CTR CAM J547 BUF YQO	1100–0300
Fort Lauderdale (FLL)	(Water–Turbojets–GPS or DME/DME–IRU equipped) PVD180 JUMPR MVY260 J174 SWL CEBEE WETRO ILM AR21 CRANS FISEL (RNAV)–STAR	1100–0300
	or (Water–Turboprops–GPS or DME/DME–IRU equipped) PVD180 JUMPR MVY260 RIFLE J174 SWL CEBEE WETRO ILM AR21 CRANS FISEL (RNAV)–STAR	1100–0300
	or (Turbojets–GPS or DME/DME–IRU equipped) PVD180 JUMPR MVY260 RIFLE J174 ORF ISO J121 CHS J79 OMN FISEL (RNAV)–STAR or (Turboprops) PVD180 JUMPR MVY260 RIFLE J174 ORF J121 CHS J79 OMN MLB BLUFI–STAR	1100–0300
	or (Turbojets) PVD180 JUMPR MVY260 RIFLE J174 ORF ISO J121 CHS J79 OMN GISSH–STAR or (Water–Turboprops) PVD180 JUMPR MVY260 RIFLE J174 SWL CEBEE WETRO ILM AR21 CRANS HIILL FATHR GISSH–STAR or (Water–Turbojets) PVD180 JUMPR MVY260 J174 SWL CEBEE WETRO ILM AR21 CRANS HIILL FATHR GISSH–STAR	1100–0300
Fort Myers (RSW)	(WATER–Turbojets) PVD180 JUMPR MVY J174 SWL CEBEE WETRO ILM AR15 HIBAC SHFTY (RNAV)–STAR	1100–0300
La Guardia (LGA)	(Above 250 kts) PUT BAF IGN V157 or (250 kts or less) PUT BAF V106 PWL V405 CASSH V123 HAARP	1100–0300 1100–0300
Miami (MIA)	(Water) PVD180 JUMPR MVY260 J174 SWL CEBEE WETRO DIW AR22 JORAY OSOGY ENVOY YOSSI MILSY BOYUR HILEY KAINS or (Water–GPS or DME/DME–IRU equipped) PVD180 JUMPR MVY260 J174 SWL CEBEE WETRO DIW AR22 JORAY HILEY (RNAV)–STAR or (Turbojets) PVD180 JUMPR MVY260 RIFLE J174 ORF ISO J121 CHS J79 OMN ANNEY–STAR or	

Terminals	Route	Effective Times (UTC)
	(Turbojets–GPS or DME/DME–IRU equipped) PVD180 JUMPR MVY260 RIFLE J174 ORF ISO J121 CHS J79 OMN HILEY (RNAV)–STAR	
	or	
	(Turboprops) PVD180 JUMPR MVY260 RIFLE J174 ORF J121 CHS J79 OMN ANNEY–STAR	
Minneapolis/St Paul (MSP)	PUT CTR CAM SYR J547 BUF YWT J63 TVC J522 GRB EAU-STAR	1100–0300
Newark (EWR)	V146 BAF V292 V213 SAX	1100–0300
	or	
	(250 kts or less) V146 BAF V292 V489 COATE	1100–0300
Orlando Executive (ORL)	PVD180 JUMPR MVY260 J174 ORF J121 CHS J79 OMN CORLL–STAR	1100–0300
	or	
	(GPS or DME/DME–IRU equipped) PVD180 JUMPR MVY260 J174 SWL CEBEE WETRO ILM AR15 HIBAC CWRLD (RNAV)–STAR	1100–0400
Orlando Intl (MCO)	PVD180 JUMPR MVY260 J174 ORF J121 CHS J79 OMN BITHO–STAR	1100–0300
	or	
	(Water–Turbojets) PVD180 JUMPR MVY260 J174 SWL CEBEE WETRO ILM AR15 HIBEC APOLO ORL	
	or	
	(GPS or DME/DME–IRU equipped) PVD180 JUMPR MVY260 J174 ORF J121 CHS J79 OMN CWRLD (RNAV)–STAR	1100–0400
	or	
	(GPS or DME/DME–IRU equipped) PVD180 JUMPR MVY260 J174 SWL CEBEE WETRO ILM AR15 HIBAC CWRLD (RNAV)–STAR	1100–0400
Philadelphia (PHL)	PVD180 JUMPR MVY260 J121 PLUME V139 BRIGS VCN–STAR	1100–0300
Pittsburgh (PIT)	PUT CTR HNK HNK271 J190 SLT GRACE–STAR	1100–0300
Raleigh-Durham (RDU)	PVD180 JUMPR MVY260 RIFLE J174 SWL ARGAL-STAR	1100–0300
St. Louis (STL)	PUT BAF J77 SAX J80 J110 VHP VLA-STAR	1100–0300
Tampa (TPA)	PUT PUT283 NELIE CMK J75 TAY LZARD–STAR	1100–0300
	or	
	(GPS or DME/DME–IRU equipped) PUT PUT283 NELIE CMK J75 TAY DADES (RNAV)–STAR	1100–0300
Washington Dulles (IAD)	PUT BAF J77 SAX J6 LRP DELRO–STAR	1100–0300
Washington Natl (DCA)	PVD180 JUMPR MVY260 J174 ATR085 ATR V308 BILIT	1100–0300
	or	
	(GPS or DME/DME–IRU equipped) PVD180 JUMPR MVY260 J174 ATR085 ATR V308 LAFLN BILIT (RNAV)–STAR	1100–0300
West Palm Beach (PBI)	(Turbojets–GPS or DME–DME/IRU equipped) PVD180 JUMPR MVY260 RIFLE J174 ORF ISO J121 CHS J79 OMN FRWAY (RNAV)–STAR	1100–0300
	or	
	(Turbojets) PVD180 JUMPR MVY260 RIFLE J174 ORF ISO CHS J79 OMN TUXXI–STAR	
	or	
	(Water–GPS or DME/DME–IRU equipped) PVD180 JUMPR MVY260 J174 SWL CEBEE WETRO DIW AR19 AYBIB FRWAY (RNAV)–STAR	1100–0300
	or	
	(Water–Turbojets) PVD180 JUMPR MVY260 J174 SWL CEBEE WETRO DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CASKI	1100–0300
READING (RDG)		
Detroit Metro Wayne Co (DTW)	KIPPI J80 J518 DJB GEMNI–STAR	

Terminals	Route	Effective Times (UTC)
RICHMOND (RIC)		
Cincinnati (CVG)	(RNAV only–at or above FL240) YEAST MOL HNN090/50 HNN GAVNN (RNAV)–STAR	
	or	
	(RNAV only–at or below FL220) YEAST MOL HNN GAVNN (RNAV)–STAR	
	or	
	(all others at or above FL240) YEAST–DP MOL HNN090/50 HNN BRUSH–STAR	
	or	
	(all others at or below FL220) YEAST–DP MOL HNN BRUSH–STAR	
Detroit Metro Wayne Co (DTW)	YEAST–DP MOL GEMNI–STAR	
Houston George Bush Intrcntl (IAH)	(Turbojets–GPS or DME/DME–IRU equipped) VUZ AEX TXMEX (RNAV)–STAR	
	or	
	(non–advanced NAV only) VUZ AEX DAS–STAR	
Houston Hobby (HOU)	(GPS or DME/DME–IRU equipped) VUZ AEX ROKIT (RNAV)– STAR	
	or	
	(non–advanced NAV only) VUZ AEX DAS–STAR	
ROANOKE (ROA)		
Detroit Metro Wayne Co (DTW)	BKW GEMNI–STAR	
ROCHESTER (ROC)		
Cincinnati (CVG)	(RNAV only) GEE BURST MAULL KODIE CTW TIGRR (RNAV)–STAR	
	or	
	(all others) GEE GEE204 BURST SLT013 SLT SLT249 KODIE CTW081 CTW CINCE–STAR	
Detroit Satellites: Coleman A Young (DET), Pontiac (PTK), Ann Arbor (ARB), Windsor (CYQG), Willow Run (YIP)	YXU PICES–STAR	
	or	
	YXU GOHMA–STARR	1100–0300
	or	
	YXU SWWAN–STAR	1100–0300
La Guardia (LGA)	(Above 250 kts) V34 BEEPS J522 EXTOL RKA RKA HAARP-STAR	
	or	
	(250 kts or less) V34 BEEPS DNY NOBBI–STAR	
Newark (EWR)	(Above 250 kts) V34 BEEPS J522 HNK SHAFF-STAR	
	or	
	(250 kts or less) V34 BEEPS J522 HNK V167 WEARD V489 COATE	
Philadelphia (PHL)	GEE SLT PSB HAR V210 BUNTS	
STATE COLLEGE (UNV)		
Detroit Metro Wayne Co (DTW)	PSB ERI SPICA–STAR	
SYRACUSE (SYR)		
Cincinnati (CVG)	(RNAV only) SYR DINES MAULL KODIE CTW TIGRR (RNAV)–STAR	
	or	
	(all others) SYR V483 DINES GEE GEE204 KELIE SLT013 SLT SLT249 KODIE CTW081 CTW CINCE–STAR	
Detroit Satellites: Coleman A Young (DET), Pontiac (PTK), Windsor (CYQG), Ann Arbor (ARB), Willow Run (YIP)	BUF YXU PICES–STAR	
	or	
	BUF YXU GOHMA–STAR	1100–0300
	or	
	BUF YXU SWWAN–STAR	1100–0300

Terminals	Route	Effective Times (UTC)
TORONTO (CYYZ)		
Cincinnati (CVG)	(RNAV only) THORL JHW MAULL KODIE CTW TIGRR (RNAV)–STAR or (all others) THORL JHW JHW194 MAULL SLT249 KODIE CTW081 CTW CINCE–STAR	
Detroit Metro Area: Willow Run (YIP), Pontiac (PTK) Coleman A Young (DET), Windsor (CYQG)	ANCOL V104 YXU PICES–STAR	
La Guardia (LGA)	(Above 250 kts) V252 GEE RKA-STAR or (250 kts or less) V252 GEE V14 BEEPS J522 EXTOL RKA292 RKA NOBBI-STAR	1100–0300
San Francisco (SFO)	GRB J106 GEP J70 ABR J32 FMG ILA PYE	
WASHINGTON/BALTIMORE METRO AREA (DCA, BWI, IAD)		
Asheville (AVL)	FLUKY DCA246 PAUKI MOL J22 PSK SUG	1100–0300
Atlanta (ATL)	FLUKY DCA246 PAUKI MOL WHINZ–STAR or (RNAV only) FLUKY DCA246 PAUKI MOL FLCON RNAV–STAR	1100–0400 1100–0300
Binghamton (BGM)	JERES J227 BABEE CFB	1100–0400
Birmingham (BHM)	FLUKY DCA246 PAUKI MOL J22 VUZ	1100–0300
Boston (BOS)	(turbojets) SWANN V268 BROSS J42 RBV J222 JFK ORW–STAR or (Turboprops only) PALEO–DP SIE J121 HTO V308 ORW V16 WOONS	
Buffalo (BUF)	JERES J220 BUF162	1100–0300
Charleston (CHS)	DAILY J61 HUBBS J193 WEAVR J121	1100–0400
Chattanooga (CHA)	FLUKY DCA246 PAUKI MOL J22 VXV	1100–0300
Chicago Midway (MDW)	AML J149 FWA GSH-STAR	1100–0300
Chicago O'Hare (ORD)	AML J149 FWA KNOX-STAR or AML J149 ROD WATSN (RNAV)–STAR	0000–2359 0000–2359
Cincinnati (CVG)	(all others) LDN J134 COLNS BRUSH–STAR	
Cleveland (CLE)	JERES J211 YNG CXR	
Columbus (CMH)	AML J149 HACKS APE	
Detroit Metro Wayne Co (DTW)	BUFFR J518 IHD J518 DJB GEMNI–STAR or AML J149 SINDE GEMNI–STAR	1100–0400
Detroit Satellites: Coleman A Young (DET), Windsor (CYQG), Pontiac (PTK), Willow Run (YIP), Ann Arbor (ARB)	JERES J211 J60 HAGUD LLEEO-STAR	
Fort Lauderdale (FLL)	(Turbojets) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN GISSH–STAR or (Turboprops) DAILY J61 HUBBS J193 J121 CHS J79 OMN MLB BLUFI–STAR or (Water-Turboprops) DAILY J61 EDDYS J174 ILM AR21 CRANS HIILL FATHR GISSH–STAR or (Water-Turbojets) DAILY J61 HUBBS KEMPR ILM AR21 CRANS HIILL FATHR GISSH–STAR	
Fort Myers (FMY, RSW)	(Turbojets–GPS or DME/DME–IRU equipped) HAFNR GVE J75 DUNKN SHFTY (RNAV)–STAR	
Fort Wayne (FWA)	AML J149	1100–0300
Houston George Bush Intcntl (IAH)	(non–advanced NAV only) FLUKY DCA246 PAUKI MOL J22 VUZ AEX DAS–STAR or (Turbojets–GPS DME/DME–IRU equipped) FLUKY DCA246 PAUKI MOL J22 VUZ AEX TXMEX (RNAV)–STAR	1100–0300 1100–0300
Houston Hobby (HOU)	(GPS or DME/DME–IRU equipped) FLUKY DCA246 PAUKI MOL J22 VUZ AEX ROKIT (RNAV)–STAR	1100–0300

Terminals	Route	Effective Times (UTC)
	or	
	(non–advanced NAV only) FLUKY DCA246 PAUKI MOL J22 VUZ AEX DAS–STAR	1100–0300
Indianapolis (IND)	AML J149 EMPTY DQN CLANG-STAR	
Jacksonville (JAX)	DAILY J61 HUBBS J193 J121 CHS SSI-STAR	1100–0400
Knoxville (TYS)	FLUKY DCA246 PAUKI MOL 22	1100–0300
La Guardia (LGA)	PALEO V44 AGARD KORRY–STAR	1100–0400
Louisville (SDF)	LDN J134 COLNS J6 UNCKL DARBY–STAR	1100–0300
Miami (MIA)	(Turbojets) DAILY J61 HUBBS J193 J121 CHS J79 VRB HEATT -STAR	
	or	
	(Turboprops) DAILY J61 HUBBS J193 J121 CHS J79 VRB J45 ABLUFI AR1	
	or	
	(Water) DAILY J61 EDDYS J174 DIW AR14 METTA AR1 HOBEE HEATT -STAR	
Milwaukee (MKE)	BUFFR J518 DJB J34 ALPHE J70 PMM V170 BRAVE	
Minneapolis (MSP)	BUFFR J518 DJB J34 BAE EAU-STAR	
New Orleans (MSY)	FLUKY DCA246 PAUKI MOL J22 MEI J31	1100–0300
Orlando Intl (MCO)	DAILY J61 HUBBS J193 J121 CHS J79 OMN BITHO-STAR	1100–0300
	or	
	(Water) DAILY J61 EDDYS J174 DIW AR14 METTA AR1 HOBEE AR6 ORL	1100–0300
Pittsburgh (PIT)	BUFFR IHD NESTO–STAR	
Rochester (ROC)	JERES J227 ULW V31 GIBBE	1100–0400
Sarasota/Bradenton (SRQ)	HAFNR GVE J75 TAY J85 GNV LAL	1100–0300
Syracuse (SYR)	JERES J227 BABEE CFB	
Tampa (TPA)	HAFNR GVE J75 TAY LZARD–STAR	1100–0300
	or	
	(GPS or DME/DME–IRU equipped) HAFNR GVE J75 TAY DADES (RNAV)–STAR	1100–0300
Teterboro (TEB)	(non–advanced navigation, turbojet only) JERES J227 J49 J70 LVZ LVZ–STAR	1100–0300
	or	
	(advanced navigation, turbojet only) SWANN JAIKE–STAR	1100–0300
Toledo (TOL)	(FL180 and above) J211 J64 EWC MFD VWV	
West Palm Beach (PBI)	(Water) DAILY J61 EDDYS J174 DIW AR14 METTA AR1 HOBEE SURFN-STAR	1100–0300
	or	
	DAILY J61 HUBBS J193 J121 CHS J79 OMN SURFN-STAR	1100–0300
Windsor Locks (BDL)	SWANN V268 BROSS J42 RBV J222 JFK DPK DPK–STAR	1100–0400
From **BALTIMORE (BWI)** only		
Albany (ALB)	SWANN-DP OOD J42 RBV LGA LGA055 V487 CANAN V130	1100–0300
Boca Raton (BCT)	(Water–Turbojets–GPS or DME/DME–IRU equipped) DAILY J61 HUBBS KEMPR WETRO DIW AR19 AYBID CAYSL (RNAV)–STAR	
	or	
	(Water–Turbojets) DAILY J61 HUBBS KEMPR WETRO DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CAYSL	
	or	
	(Turbojets–GPS or DME/DME–IRU equipped) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN CAYSL (RNAV)–STAR	
	or	
	(Turbojets) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN TUXXI–STAR	
Boston (BOS)	(Turbojets) SWANN-DP OOD J42 RBV J222 JFK ORW–STAR	
	or	

Terminals	Route	Effective Times (UTC)
	(Turboprops) PALEO–DP SIE J121 HTO V308 ORW V16 WOONS	
Bridgeport (BDR)	PALEO-DP SIE J121 MAD193 KEYED	1100–0300
Charleston (CHS)	(Turbojets) DAILY J61 HUBBS J193 HCM FKN J79 CHS	
Chicago (MDW)	AML J149 FWA GOSHEN–STAR	
Chicago (ORD)	AML J149 ROD WATSN (RNAV)–STAR	
	or	
	AML J149 FWA KNOX–STAR	0000–2359
Dallas/Forth Worth (DFW)	(RNAV only) TERPZ–DP LDN J134 COLNS J6 HVQ J6 LIT BONHAM–STAR	1100–0300
	or	
	LDB J134 COLNS J6 HVQ J6 LIT BONHAM–STAR	1100–0300
Dayton (DAY)	AML J149 HACKS APE DANEI–STAR	1100–0400
Denver (DEN)	TERPZ (RNAV)–DP LDN J134 HNN J134 STL J110 GCK J154 RYLIE DANDD—STAR	1100–0300
	or	
	LDN J134 HNN J134 STL J110 GCK J154 RYLIE DANDD–STAR	1100–0300
Fort Lauderdale (FLL, FXE, OPF)	(Turboprops) V93 PXT V213 COLIN HCM J193 J121 CHS J79 OMN MLB BLUFI–STAR	
	or	
	(Water–Turboprops) V93 PXT V213 COLIN HCM ILM AR21 CRANS HIILL FATHR GISSH–STAR	
	or	
	(Turbojets–GPS or DME/DME–IRU equipped) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN FISEL (RNAV)–STAR	
	or	
	(Turbojets) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN GISSH–STAR	
	or	
	(Water–Turboprops–GPS or DME/DME–IRU equipped) V93 PXT V213 COLIN HCM ILM AR21 CRANS FISEL (RNAV)–STAR	
	or	
	(Water–Turbojets–GPS or DME/DME–IRU equipped) DAILY J61 HUBBS KEMPR ILM AR21 CRANS FISEL (RNAV)–STAR	
	or	
	(Water–Turbojets) DAILY J61 HUBBS KEMPR ILM AR21 CRANS HILL FATHR GISSH–STAR	
Fort Myers (FYM, RSW)	(Turbojets–GPS or DME/DME–IRU equipped) HAFNR GVE J75 DUNKN SHFTY (RNAV)–STAR	
	or	
	(WATER–Turbojets–GPS or DME/DME–IRU equipped) DAILY J61 HUBBS KEMPR ILM AR15 HIBAC SHFTY (RNAV)–STAR	
Hartford (HFD)	SWANN-DP OOD J42 RBV J222 JFK DPK MAD V1	1100–0300
Islip (ISP)	PALEO-DP SIE J121 SARDI CCC	1100–0300
Jacksonville (JAX)	(Turbojets) DAILY J61 HUBBS J193 HCM FKN J79 CHS SSI–STAR	
Kansas City (MCI)	TERPZ (RNAV)–DP LDN J134 HNN J134 STL MCM BRAYMER–STAR	1100–0300
	or	
	LDN J134 HNN J134 STL MCM BRAYMER–STAR	1100–0300
Louisville (SDF)	(RNAV only) TERPZ DP LDN J134 COLNS J6 HVQ J6 UNCKL DARBY–STAR	
	or	
	LDN J134 COLNS J6 HVQ J 6 UNCKL DARBY–STAR	
Memphis (MEM)	(RNAV only) TERPZ–DP LDN J134 COLNS J6 HVQ J6 BWG LTOWN (RNAV)–STAR	1100–0300
	or	
	LDN J134 COLNS J6 HVQ J6 BWG LTOWN (RNAV)–STAR	1100–0300

Terminals	Route	Effective Times (UTC)
Miami (MIA, TMB, HST)	(Turbojets–GPS or DME/DME–IRU equipped) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN HILEY (RNAV)–STAR	
	or	
	(Turboprops) V93 PXT V213 COLIN HCM J193 J121 CHS J79 OMN ANNEY–STAR	
	or	
	(Water–Turbojets–GPS or DME/DME–IRU equipped) DAILY J61 HUBBS KEMPR WETRO DIW AR22 JORAY HILEY (RNAV)–STAR	
	or	
	(Water–Turbojets) DAILY J61 HUBBS KEMPR WETRO DIW AR22 JORAY OSOGY ENVOY YOSSI MILSY BOYUR HILEY KAINS	
	or	
	(Turbojets) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN ANNEY–STAR	
	or	
	(Water–Turboprops–GPS or DME/DME–IRU equipped) V93 PXT V213 COLIN HCM J193 CVI DIW AR22 JORAY HILEY (RNAV)–STAR	
	or	
	(Water–Turboprops) V93 PXT V213 COLIN HCM J193 CVI DIW AR22 JORAY OSOGY ENVOY YOSSI MILSY BOYUR HILEY KAINS	
Nashville (BNA)	(RNAV only) TERPZ–DP LDN J134 COLNS J6 HVQ J6 YOCKY GUITR–STAR	1100–0300
	or	
	LDN J134 COLNS J6 HVQ J6 YOCKY GUITR–STAR	1100–0300
Newark (EWR)	SWANN–DP V445 DQO DYLIN–STAR	1100–0300
	or	
	(GPS or DME/DME IRU equipped) SWANN–DP V445 DQO PHLBO (RNAV)–STAR	1100–0300
Orlando Executive (ORL)	(GPS or DME/DME–IRU equipped) DAILY J61 HUBBS KEMPR ILM AR15 HIBAC CWRLD(RNAV)–STAR	1100–0400
Orlando Intl (MCO)	(Water–Turbojets) DAILY J61 HUBBS KEMPR ILM AR15 HIBAC APOLO ORL	
	or	
	(GPS or DME/DME–IRU equipped) DAILY J61 HUBBS J193 J121 CHS J79 OMN CWRLD (RNAV)–STAR	1100–0400
	or	
	(GPS or DME/DME–IRU equipped) DAILY J61 HUBBS KEMPR ILM AR15 HIBAC CWRLD (RNAV)–STAR	1100–0400
Phoenix Sky Harbor (PHX)	TERPZ(RNAV)–DP LDN J134 HNN J134 LBL J19 ZUN EAGUL (RNAV)–STAR	1100–0300
	or	
	LDN J134 HNN J134 LBL J19 ZUN BUNTR–STAR	1100–0300
Providence (PVD)	SWANN-DP OOD J42 RBV HTO GREEN–STAR	1100–0400
	or	
	(Turbojets, Non–Advanced Nav only) SWANN–DP OOD J42 RBV HTO V268 MINNK	1100–0400
Savannah (SAV)	(Turbojets) DAILY J61 HUBBS J193 HCM FKN J79 CHS	
St. Louis (STL)	TERPZ (RNAV)–DP LDN J134 HNN J134 FLM PXV QBALL–STAR	1100–0300
	or	
	LDN J134 HNN J134 FLM PXV QBALL–STAR	1100–0300
Teterboro (TEB)	(Turbojets, Non–Advanced Nav Only) JERES J227 J49 J70 LVZ LVZ–STAR	1100–0300

Terminals	Route	Effective Times (UTC)
West Palm Beach (PBI)	(Turbojets–GPS or DME/DME–IRU equipped) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN FRWAY (RNAV)–STAR	1100–0300
	or	
	(Turbojets) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN TUXXI–STAR	1100–0300
	or	
	(Water–Turbojets–GPS or DME/DME–IRU equipped) DAILY J61 HUBBS KEMPR WETRO DIW AR19 AYBID FRWAY (RNAV)–STAR	
	or	
	(Water–Turbojets) DAILY J61 HUBBS KEMPR WETRO DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CASKI	
White Plains (HPN)	SWANN–DP OOD J150 CYN BOUNO–STAR	1100–0300
Windsor Locks (BDL)	SWANN–DP ODD J42 RBV J222 JFK DPK–STAR	1100–0300
From **WASHINGTON DULLES (IAD)** only		
Albany (ALB)	SWANN V268 BROSS J42 RBV LGA LGA055 V487 CANAN V130	1100–0400
Boca Raton (BCT)	(Turbojets–GPS or DME/DME–IRU equipped) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN CAYSL (RNAV)–STAR	
	or	
	(Turbojets) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN TUXXI–STAR	
	or	
	(Water–Turbojets GPS or DME/DME–IRU equipped) DAILY J61 HUBBS KEMPR WETRO DIW AR19 AYBID CAYSL (RNAV)–STAR	
	or	
	(Water–Turbojets) DAILY J61 HUBBS KEMPR WETRO DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CAYSL	
Bridgeport (BDR)	AML091 PALEO V44 SIE J121 MAD193 KEYED	1100–0400
Charleston (CHS)	(Turbojets) DAILY J61 HUBBS J193 HCM FKN J79 CHS	1100–0400
Chicago (MDW)	AML J149 FWA GOSHEN–STAR	
Chicago (ORD)	AML J149 ROD WATSN (RNAV)–STAR	
	or	
	AML J149 FWA KNOX–STAR	
Dallas/Fort Worth (DFW)	(RNAV only) BLUES LDN J134 COLNS J6 HVQ J6 LIT BONHAM–STAR	1100–0300
	or	
	LDN J134 COLNS J6 HVQ J6 LIT BONHAM–STAR	1100–0300
Dayton (DAY)	AML J149 HACKS APE DANEI–STAR	1100–0400
Denver (DEN)	(RNAV only) BLUES LDN J134 HNN J134 STL J110 GCK J154 RYLIE DANDD–STAR	1100–0300
	or	
	LDN J134 HNN J134 STL J110 GCK J154 RYLIE DANDD–STAR	1100–0300
Fort Lauderdale (FLL)	(Turbojets–GPS or DME/DME–IRU equipped) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN FISEL (RNAV)–STAR	
	or	
	(Turbojets) DAILY J61 HUBBS J193 J121 CHS J79 OMN GISSH–STAR	
	or	
	(Turboprops) DAILY J61 HUBBS J193 J121 CHS J79 VRB BLUFI–STAR	
	or	

Terminals	Route	Effective Times (UTC)
	(Water–Turboprops–GPS or DME/DME–IRU equipped) DAILY J61 EDDYS J174 ILM AR21 CRANS FISEL (RNAV)–STAR	
	or	
	(Water–Turboprops) DAILY J61 EDDYS J174 ILM AR21 CRANS FATHR GISSH–STAR	
	or	
	(Water–Turbojets–GPS or DME/DME–IRU equipped) DAILY J61 HUBBS KEMPR ILM AR21 CRANS FISEL (RNAV)–STAR	
	or	
	(Water–Turbojets) DAILY J61 HUBBS KEMPR ILM AR21 CRANS FATHR GISSH–STAR	
Fort Myers (FMY, RSW)	(Turbojets–GPS or DME/DME–IRU equipped) HAFNR GVE J75 DUNKN SHFTY (RNAV)–STAR	
	or	
	(WATER–Turbojets–GPS or DME/DME–IRU equipped) DAILY J61 HUBBS KEMPR WETRO ILM AR15 HIBAC SHFTY (RNAV)–STAR	
Hartford (HFD)	SWANN V268 BROSS J42 RBV J222 JFK DPK MAD V1	1100–0300
Islip (ISP)	AML091 PALEO V44 SIE J121 SARDI CCC	1100–0400
Jacksonville (JAX)	(Turbojets) DAILY J61 HUBBS J193 HCM FKN CHS SSI–STAR	
Kansas City (MCI)	(RNAV only) BLUES LDN J134 HNN J134 STL MCM BRAYMER–STAR	1100–0300
	or	
	LDN J134 HNN J134 STL MCM BRAYMER–STAR	1100–0300
Louisville (SDF)	(RNAV only) BLUES LDN J134 COLNS J6 HVQ J6 UNCKL DARBY–STAR	1100–0300
	or	
	LDN J134 COLNS J6 HVQ J6 UNCKL DARBY–STAR	1100–0300
Memphis (MEM)	(RNAV only) BLUES LDN J134 COLNS J6 HVQ J6 BWG LTOWN (RNAV)–STAR	1100–0300
	or	
	LDN J134 COLNS J6 HVQ J6 BWG WLDER–STAR	1100–0300
Miami (MIA)	(Turbojets) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN ANNEY–STAR	
	or	
	(Water–Turbojets–GPS or DME/DME–IRU equipped) DAILY J61 HUBBS KEMPR WETRO DIW AR22 JORAY HILEY (RNAV)–STAR	
	or	
	(Turbojets–GPS or DME/DME–IRU equipped) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN HILEY (RNAV)–STAR	
	or	
	(Turboprops) V93 PXT V213 COLIN HCM J193 J121 CHS J79 OMN ANNEY–STAR	
	or	
	(Water) DAILY J61 HUBBS KEMPR WETRO DIW AR22 JORAY OSOGY ENVOY YOSSI MILSY BOYUR HILEY KAINS	
Nashville (BNA)	(RNAV only) BLUES LDN J134 COLNS J6 HVQ J6 YOCKY GUITR–STAR	1100–0300
	or	
	LDN J134 COLNS J6 HVQ J6 YOCKY GUITR–STAR	1100–0300
Newark (EWR)	(GPS or DME/DME–IRU equipped) AML SWANN V445 DQO PHLBO (RNAV)–STAR	1100–0400
Orlando Executive (ORL)	(GPS or DME/DME–IRU equipped) DAILY J61 HUBBS KEMPR ILM AR15 HIBAC CWRLD (RNAV)–STAR	1100–0400

Terminals	Route	Effective Times (UTC)
Orlando Intl (MCO)	(Water–Turbojets) DAILY J61 HUBBS KEMPR ILM AR15 HIBAC APOLO ORL	
	or	
	(GPS or DME/DME–IRU equipped) DAILY J61 HUBBS J193 J121 CHS J79 OMN CWRLD (RNAV)–STAR	1100–0400
	or	
	(GPS or DME/DME–IRU equipped) DAILY J61 HUBBS KEMPR ILM AR15 HIBAC CWRLD (RNAV)–STAR	1100–0400
Phoenix (PHX)	(RNAV only) BLUES LDN J134 HNN J134 LBL J19 ZUN EAGUL(RNAV)–STAR	1100–0300
	or	
	LDN J134 HNN J134 LBL J19 ZUN BUNTR–STAR	1100–0300
Providence (PVD)	SWANN V268 BROSS J42 RBV HTO GREEN–STAR	1100–0400
	or	
	(Turbojets, Non–Advanced Navigation) SWANN V268 BROSS J42 RBV HTO V268 MINNK	1100–0400
Savannah (SAV)	(Turbojets) DAILY J61 HUBBS J193 HCM FKN J79 CHS	
St. Louis (STL)	(RNAV only) BLUES LDN J134 HNN J134 FLM PXV QBALL–STAR	1100–0300
	or	
	LDN J134 HNN J134 FLM PXV QBALL–STAR	1100–0300
Teterboro (TEB)	(Turbojets, Non–Advanced Nav Only) JERES J227 J49 J70 LVZ LVZ–STAR	1100–0300
West Palm Beach (PBI)	(Turbojets–GPS or DME/DME–IRU equipped) DAILY J61 HUBBS KEMPR WETRO DIW AR19 AYBID FRWAY (RNAV)–STAR	
	or	
	(Turbojets) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN TUXXI–STAR	
	or	
	(Turbojets–GPS or DME/DME–IRU equipped) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN FRWAY (RNAV)–STAR	
	or	
	(Water–Turbojets) DAILY J61 HUBBS KEMPR WETRO DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CASKI	
White Plains (HPN)	SWANN V268 BROSS J150 CYN BOUNO–STAR	1100–0400
From **WASHINGTON NATL (DCA)** only		
Albany (ALB)	SWANN V268 BROSS J42 RBV LGA LGA055 V487 CANAN V130	1100–0400
Boca Raton (BCT)	(Turbojets–GPS or DME/DME–IRU equipped) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN CAYSL (RNAV)–STAR	
	or	
	(Turbojets) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN TUXXI–STAR	
	or	
	(Water–Turbojets–GPS or DME/DME–IRU equipped) DAILY J61 HUBBS KEMPR WETRO DIW AR19 AYBID CAYSL (RNAV)–STAR	
	or	
	(Water–Turbojets) DAILY J61 HUBBS KEMPR WETRO DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CAYSL	
Boston (BOS)	(Turboprops) PALEO–DP SIE J121 HTO V308 ORW V16 WOONS	
Bridgeport (BDR)	PALEO V44 SIE J121 MAD193 KEYED	1100–0400
Charleston (CHS)	(Turbojets) DAILY J161 HUBBS J193 HCM FKN J79 CHS	
Chicago (MDW)	AML J149 FWA GOSHEN–STAR	

Terminals	Route	Effective Times (UTC)
Chicago (ORD)	AML J149 ROD WATSN (RNAV)–STAR or AML J149 FWA KNOX–STAR	
Dallas/Fort Worth (DFW)	LDN J134 COLNS J6 HVQ J6 LIT BONHAM–STAR	1100–0300
Dayton (DAY)	AML J149 HACKS APE DANEI–STAR	1100–0400
Denver (DEN)	LDN J134 HNN J134 STL J110 GCK J154 RYLIE DANDD–STAR	1100–0300
Fort Lauderdale (FLL)	(Turbojets–GPS or DME/DME–IRU equipped) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN FISEL (RNAV)–STAR or (Water–Turbojets–GPS or DME/DME–IRU equipped) DAILY J61 HUBBS KEMPR ILM AR21 CRANS FISEL (RNAV)–STAR or (Turbojets) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN GISSH–STAR or (Water–Turbojets) DAILY J61 HUBBS KEMPR ILM AR21 CRANS HIILL FATHR GISSH–STAR or (Water–Turboprops–GPS or DME/DME–IRU equipped) DAILY J61 EDDYS J174 ILM AR21 CRANS FISEL (RNAV)–STAR or (Turboprops) DAILY J61 HUBBS J193 J121 CHS J79 OMN MLB BLUFI–STAR or (Water–Turboprops) DAILY J61 EDDYS J174 ILM AR21 CRANS HIILL FATHR GISSH–STAR	
Fort Myers (FMY, RSW)	(Turbojets–GPS or DME/DME–IRU equipped) HAFNR GVE J75 DUNKN SHFTY (RNAV)–STAR or (WATER–Turbojets–GPS or DME/DME–IRU equipped) DAILY J61 HUBBS KEMPR WETRO ILM AR15 HIBAC SHFTY (RNAV)–STAR	
Hartford (HFD)	SWANN V268 BROSS J42 RBV J222 JFK DPK MAD V1	1100–0400
Islip (ISP)	PALEO V44 SIE J121 SARDI CCC	1100–0400
Jacksonville (JAX)	(Turbojets) DAILY J61 HUBBS J193 HCM FKN J79 CHS SSI–STAR	
Kansas City (MCI)	LDN J134 HNN J134 STL MCM BRAYMER–STAR	1100–0300
Louisville (SDF)	LDN J134 COLNS J6 HVQ J6 UNCKL DARBY–STAR	1100–0300
Memphis (MEM)	LDN J134 COLNS J6 HVQ J6 BWG WLDER–STAR	1100–0300
Miami (MIA, TMB, HST)	(Turbojets–GPS or DME/DME–IRU equipped) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN HILEY (RNAV)–STAR or (Water–Turbojets–GPS or DME/DME–IRU equipped) DAILY J61 HUBBS KEMPR WETRO DIW AR22 JORAY HILEY (RNAV)–STAR or (Turbojets) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN ANNEY–STAR or (Water–Turbojets) DAILY J61 HUBBS KEMPR WETRO DIW AR22 JORAY OSOGY ENVOY YOSSI MILSY BOYUR HILEY KAINS	

Terminals	Route	Effective Times (UTC)
Nashville (BNA)	LDN J134 COLNS J6 HVQ J6 YOCKY GUITR–STAR	1100–0300
Newark (EWR)	(GPS or DME/DME–IRU equipped) SWANN V445 DQO PHLBO (RNAV)–STAR	1100–0400
Orlando Executive (ORL)	(GPS or DME/DME–IRU equipped) DAILY J61 HUBBS KEMPR ILM AR15 HIBAC CWRLD (RNAV)–STAR	1100–0400
Orlando Intl (MCO)	(Water–Turbojets) DAILY J61 HUBBS KEMPR ILM AR15 HIBAC APOLO ORL or (GPS or DME/DME–IRU equipped) DAILY J61 HUBBS J193 J121 CHS J79 OMN CWRLD (RNAV)–STAR	1100–0400
	or (GPS or DME/DME–IRU equipped) DAILY J61 HUBBS KEMPR ILM AR15 HIBAC CWRLD (RNAV)–STAR	1100–0400
Phoenix (PHX)	LDN J134 HNN J134 LBL J19 ZUN BUNTR–STAR	1100–0300
Providence (PVD)	SWANN V268 BROSS J42 RBV HTO GREEN–STAR. or (Turbojets, Non–Advanced Navigation) SWANN V268 BROSS J42 RBV HTO V268 MINK	1100–0400 1100–0400
Savannah (SAV)	(Turbojets) DAILY J61 HUBBS J193 HCM FKN J79 CHS	
St. Louis (STL)	LDN J134 HNN J134 FLM PXV QBALL–STAR	1100–0300
Teterboro (TEB)	(Turbojets, Non–Advanced Nav Only) JERES J227 J49 J70 LVZ LVZ–STAR	1100–0300
West Palm Beach (PBI)	(Turbojets–GPS or DME/DME–IRU equipped) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN FRWAY (RNAV)–STAR or (Water–Turbojets–GPS or DME/DME IRU equipped) DAILY J61 HUBBS KEMPR WETRO DIW AR19 AYBID FRWAY (RNAV)–STAR or (Turbojets) DAILY J61 HUBBS J193 HCM ISO J121 CHS J79 OMN TUXXI–STAR or (Water–Turbojets) DAILY J61 HUBBS KEMPR WETRO DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CASKI	
White Plains (HPN)	SWANN V268 BROSS J150 CYN BOUNO–STAR	1100–0400
WILKES–BARRE/SCRANTON (AVP)		
Cincinnati (CVG)	(RNAV only) LVZ SEG PSB MAULL KODIE CTW TIGRR (RNAV)–STAR or (all others) LVZ SEG PSB PSB281 MAULL SLT249 KODIE CTW081 CTW CINCE–STAR	
WINDSOR LOCKS (BDL)		
Atlanta (ATL)	PWL SAX J77 PTW J48 ODF WHINZ–STAR or (RNAV only) PWL SAX J77 PTW J48 ODF FLCON (RNAV)–STAR	
Baltimore (BWI)	PWL CMK J75 MXE V378 BAL	1100–0300
Boca Raton (BCT)	(Turbojets GPS or DME/DME–IRU equipped) COASTAL (HI)–DP GEDIC J174 ORF ISO J121 CHS J79 OMN CAYSL (RNAV)–STAR or (Turbojets) COASTAL (HI)–DP GEDIC J174 ORF ISO J121 CHS J79 OMN TUXXI–STAR or (Water–Turbojets–GPS or DME/DME–IRU equipped) COASTAL (HI)–DP GEDIC J174 SWL CEBEE WETRO DIW AR19 AYBID CAYSL (RNAV)–STAR or	

Terminals	Route	Effective Times (UTC)
	(Water–Turbojets) COASTAL (HI)–DP GEDIC J174 SWL CEBEE WETRO DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CAYSL	
Chicago O'Hare (ORD)	CTR CAM SYR J63 EHMAN YXU J547 FNT PAITN–STAR	1100–0300
Cincinnati (CVG)	CTR HNK J49 PSB PSB281 MAULL SLT249 KODIE CTW081 CTW CINCE–STAR	
Dallas/Ft Worth (DFW)	PWL SAX J6 LIT BYP	1100–0300
Detroit Metro Wayne Co (DTW)	CTR CAM J547 BUF BUF267 YQO094 QUO SPICA–STAR	1100–0300
Detroit Satellites: Ann Arbor (ARB), Coleman A Young Muni (DET), Pontiac (PTK), Windsor (CYQG), Willow Run (YIP)	SYR J547 YXU GOHMA–STAR or SYR J547 YXU SWWAN–STAR or SYR J547 YXU PICES–STAR or CTR CAM J547 BUF YQO	1100–0300 1100–0300 1100–0300
Fort Lauderdale (FLL, FXE, OPF)	(Water–Turbojets) COASTAL (HI)–DEP GEDIC J174 SWL CEBEE WETRO ILM AR21 CRANS HIILL FATHR GISSH–STAR or (Water–Turboprops) COASTAL (HI)–DP GEDIC J174 ILM AR21 CRANS HIILL FATHR GISSH–STAR or (Turbojets) COASTAL (HI)–DP GEDIC J174 ORF ISO J121 CHS J79 OMN GISSH–STAR or (Turboprops) COASTAL (HI)–DP GEDIC J174 ORF J121 CHS J79 OMN MLB BLUFI–STAR or (Water–Turbojets–GPS or DME/DME–IRU equipped) COASTAL (HI)–DP GEDIC J174 SWL CEBEE WETRO ILM AR21 CRANS FISEL (RNAV)–STAR or (Water–Turboprops–GPS or DME/DME–IRU equipped) COASTAL (HI)–DP GEDIC J174 ILM AR21 CRANS FISEL (RNAV)–STAR or (Turbojets–GPS or DME/DME–IRU equipped) COASTAL (HI)–DP GEDIC J174 ORF ISO J121 CHS J79 OMN FISEL (RNAV)–STAR	1100–0300 1100–0300 1100–0300 1100–0300 1100–0300 1100–0300 1100–0300
Fort Myers (RSW)	(WATER–Turbojets) COASTAL (HI)–DP GEDIC J174 SWL CEBEE WETRO ILM AR15 HIBAC SHFTY (RNAV)–STAR	
Miami (MIA, TMB, HST)	(Turbojets–GPS or DME/DME equipped) COASTAL (HI)–DP GEDIC J174 ORF ISO J121 CHS J79 OMN HILEY (RNAV)–STAR or (Turbojets) COASTAL (HI)–DP GEDIC J174 ORF ISO J121 CHS J79 OMN ANNEY–STAR or (Water–Turbojets–GPS or DME/DME–IRU equipped) COASTAL (HI)–DP GEDIC J174 SWL CEBEE WETRO DIW AR22 JORAY HILEY (RNAV)–STAR or (Water–Turbojets) COASTAL (HI)–DP GEDIC J174 SWL CEBEE WETRO DIW AR22 JORAY OSOGY ENVOY YOSSI MILSY BOYUR HILEY KAINS or (Turboprops) COASTAL (HI)–DP GEDIC J174 ORF J121 CHS J79 OMN ANNEY–STAR	

Terminals	Route	Effective Times (UTC)
Minneapolis/St Paul (MSP)	CTR CAM SYR J547 BUF YWT J63 TVC J522 GRB EAU–STAR	1100–0300
Orlando Exec (ORL)	COASTAL (HI)–DP GEDIC J174 ORF J121 CHS J79 OMN BITHO–STAR	1100–0300
	or	
	(GPS or DME/DME–IRU equipped) COASTAL (HI)–DP GEDIC J174 SWL CEBEE WETRO ILM AR15 HIBACK CWRLD (RNAV)–STAR	1100–0400
Orlando Intl (MCO)	COASTAL (HI)–DP GEDIC J174 ORF J121 CHS J79 OMN BITHO–STAR	1100–0300
	or	
	(Water–Turbojets) COASTAL (HI)–DP GEDIC J174 SWL CEBEE WETRO ILM AR15 HIBAC APOLO ORL	1100–0300
	or	
	(GPS or DME/DME–IRU equipped) COASTAL (HI)–DP GEDIC J174 ORF J121 CHS J79 OMN CWRLD (RNAV)–STAR	1100–0400
	or	
	(GPS or DME/DME–IRU equipped) COASTAL (HI)–DP GEDIC J174 SWL CEBEE WETRO ILM AR15 HIBAC CWRLD (RNAV)–STAR	1100–0400
Philadelphia (PHL)	COASTAL–DP SHERL J121 BRIGS VCN–STAR	1100–0300
Pittsburgh (PIT)	CTR HNK HNK271 J190 SLT GRACE–STAR	1100–0300
Raleigh–Durham (RDU)	PWL CMK J75 GVE SBV	1100–0300
St. Louis (STL)	PWL SAX J80 VHP VLA–STAR	1100–0300
Tampa (TPA)	PWL CMK J75 TAY LZARD–STAR	1100–0300
Washington Dulles (IAD)	PWL SAX J6 LRP DELRO–STAR	1100–0300
Washington Natl (DCA)	COASTAL–DP GEDIC J174 ATR085 ATR V308 BILIT	1100–0300
	or	
	(GPS or DME/DME–IRU equipped) COASTAL (HI)–DP GEDIC J174 ATR085 ATR V308 LAFLN BILIT (RNAV)–STAR	
West Palm Beach (PBI)	(Turbojets–GPS or DME/DME–IRU equipped) COASTAL (HI)–DP GEDIC J174 ORF ISO J121 CHS J79 OMN FRWAY (RNAV)–STAR	1100–0300
	or	
	(Water–Turbojets) COASTAL (HI)–DP GEDIC J174 SWL CEBEE WETRO DIW AR19 AYBID MIMMI NEUBE SWOMP SANZZ CASKI	
	or	
	(Water–Turbojets–GPS or DME/DME–IRU equipped) COASTAL (HI)–DP GEDIC J174 SWL CEBEE WETRO DIW AR19 AYBID FRWAY (RNAV)–STAR	
	or	
	(Turbojets) COASTAL (HI)–DP GEDIC J174 ORF ISO J121 CHS J79 OMN TUXXI–STAR	1100–0300

SPECIAL HIGH ALTITUDE DIRECTIONAL ROUTES

Terminals	Route	Effective Times (UTC)
Traffic overflying Atlanta Center Eastbound originating South of a line from DFW to JFK:		
GRD J209 RDU J207 FKN J79 JFK DPK DPK-STAR		
BOS	(Jet only) GRD J209 RDU J207 FKN J79 JFK ORW–STAR or (Prop only) SIE J121 HTO V308 ORW V16 WOONS	
BWI	SPA J14 RIC OTT-STAR or (GPS or DME/DME–IRU equipped) SPA J14 RIC RAVNN (RNAV)STAR	
DCA	SPA J14 RIC IRONS–STAR or (GPS or DME/DME–IRU equipped) SPA J14 RIC OJAAY (RNAV)–STAR	
EWR	SPA J14 J15 FAK DYLIN–STAR	
IAD	SPA J14 J51 FAK COATT-STAR	
JFK	GRD J209 ORF J121 SIE CAMRN-STAR	
LGA	AHN J208 HPW J191 PXT KORRY–STAR	
PHL	SPA J14 J51 FAK DPNT-STAR	
Traffic originating East of Chicago Terminating Denver:		
DJB	J60 IOW DSM J144 OBH J10 LBF SAYGE–STAR	1300–0100
BAE	J16 MCW ONL J114 SNY LANDR–STAR	
STL	STL J110 GCK J154 RYLIE DANDD–STAR	1300–0100
Traffic overflying Cleveland Center and South of SLT:		
HPN	(Above 250 kts) SLT J190 CFB DNY280 DNY VALRE-STAR or PSB J49 CFB220 CFB DNY280 DNY VALRE-STAR or (250 kts or less) SLT J190 CFB DNY280 DNY NOBBI-STAR or PSB J49 CFB220 CFB DNY280 DNY NOBBI-STAR	
Traffic originating South of Wilmington, NC:		
ILM J109 FAK DYLIN–STAR	1100–0300	

Terminals	Route	Effective Times (UTC)
JFK	ORF J121 SIE CAMRN-STAR	1100–0300
LGA	ILM TYI HPW J191 PXT KORRY–STAR	1100–0300
Traffic overflying Indianapolis Center area Eastbound:		
BOS	ROD J29 J82 ALB GDM GDM-STAR	1100–0300
JFK	ROD J29 J70 LVZ LENDY-STAR	1100–0300
LGA	ROD J29 J146 MIP-STAR	1100–0300
	or	
	BKW J42 GVE KORRY–STAR	1100–0300
PHL	ROD J152 HAR V210 BUNTS	1100–0300
	or	
	BKW J42 GVE DPNT-STAR	1100–0300
PIT	APE CTW V443 WISKE	
	or	
	HNN JPU V117 WISKE	
TEB/MMU/CDW SATELLITES	(Non–Advanced Nav Aircraft only) ROD J29	
	JHW J70 LVZ LVZ–STAR	
Traffic overflying Indianapolis Center area Eastbound originating North and West of a line from DFW to JFK:		
ABE	RID CXR H146	
ACY	ROD J152 HAR LRP DQO ENO SIE	
BDL	ROD J29 JHW J82 WILET RKA SWEDE-STAR .	
BWI	ROD J152 J162 MGW EMI-STAR	
CEF	ROD J29 JHW J82 ALB	
FRG	ROD J29 JHW J82 J522 HNK IGN V58 V91	
	CCC	
HPN	(Above 250 kts) ROD J29 JHW J82 WILET	
	DNY VALRE-STAR	
	or	
	(250 kts or less) ROD J29 JHW J82 WILET	
	DNY NOBBI-STAR	
ISP	(Above 250 kts) ROD J152 J178 PSB J49	
	HNK J68 V130 TOMES MAD V34 CREAM V16	
	CCC	
	or	
	(250 kts or less) ROD J152 J78 PSB J49	
	HNK DNY LOVES–STAR	
TEB/MMU/CDW/LDJ	ROD J29 JHW J70 LVZ-STAR	
Traffic overflying Indianapolis Center area Eastbound originating South and East of a line from DFW to JFK:		
ABE	BKW LDN LDN031 V377 HAR V162 DUMMR.	
ACY	BKW J42 OTT SIE	
BWI	BKW J147 CSN OTT-STAR	
	or	
	(GPS or DME/DME–IRU equipped) BKW J147	
	CSN RAVNN (RNAV)–STAR	
DAA	BKW J213 V143 V4 AML	
DCA/ADW	BKW WZRRD–STAR	
	or	
	BKW ELDEE (RNAV)–STAR	
DOV	BKW J42 GVE ENO-STAR	
HPN	BKW J42 OOD J150 CYN BOUNO-STAR	
IAD	BKW ROYIL–STAR	1100–1830 and 2230–0300
	or	
	BKW SHNON (RNAV)–STAR	1100–1830 and 2230–0300
	or	
	GSO J14 CREWE J51 FAK COATT–STAR	1830–2230
	or	
	GSO J14 CREWE J51 FAK BARIN	
	(RNAV)–STAR	1830–2230
LFI	BKW J42 MOL J24 HCM	
NSF	BKW J213 FINKS AML259 AML	
PHL	BKW J42 GVE DPNT-STAR	
TEB/MMU/CDW/LDJ	(Advanced–Nav Aircraft only) BKW J42 GVE	
	JAIKE–STAR	
WRI	BKW J42 OTT SIE–STAR	

Terminals	Route	Effective Times (UTC)
Traffic overflying Indianapolis (ZID) or Cleveland Centers (ZOB) landing in the Washington Metropolitan Area:		
BWI	MGW EMI-STAR	1100–0300
	or	
	BKW J147 CSN OTT-STAR	1100–0300
	or	
	(GPS or DME/DME–IRU equipped) BKW J147 CSN RAVNN (RNAV)–STAR	1100–0300
DCA	APE J30 BUCKO BUCKO–STAR	1100–0300
	or	
	BKW FINKS–STAR	1100–0300
	or	
	(GPS or DME/DME–IRU equipped) APE J30 BUCKO ELDEE (RNAV)–STAR	1100–0300
	or	
	(GPS or DME/DME–IRU equipped) BKW ELDEE (RNAV)–STAR	1100–0300
	APE J30 SHAAR WZRRD–STAR	
	or	
	or	
	APE J30 SHAAR ELDEE	
	or	
	BKW ELDEE (RNAV)–STAR	
	or	
IAD	APE AIR MGW MGW121 VERNI ESL ROYIL–STAR	
	or	
	BKW ROYIL–STAR	
	or	
	HVQ ROYIL–STAR	
	or	
	(GPS or DME/DME–IRU equipped) APE AIR MGW VERNI ESL SHNON (RNAV)–STAR	
	or	
	BKW SHNON (RNAV)–STAR	
	or	
	HVQ SHNON (RNAV)–STAR	
Traffic overflying Elwood City VORTAC (EWC) Northbound:		
ROC	EWC EWC050130 GEE	
BUF	EWC DKK DKK020 WELLA	
SYR	EWC EWC050130	
Traffic entering ZBW originating South and West of a line from HNK to ROC landing HYA/ACK/MVY:		
J16	J16 ALB ENE V167 LFV	1100–0300
J94	J94 ALB ENE V167 LFV	1100–0300
J82	J82 ALB ENE V167 LFV	1100–0300
J190	J190 ALB ENE V167 LFV	1100–0300
HNK	HNK ENE V167 LFV	1100–0300
Traffic entering ZBW via RBV or JFK landing HYA:		
RBV	J62 MVY241 MVY	
	or	
	FLAPE MVY	1100–0300
JFK	J79 MVY241 MVY	
	or	
	FLAPE MVY	1100–0300
Traffic entering ZBW via RBV or JFK landing MVY:		
RBV	LIBBE FLAPE MVY	1100–0300
JFK	J79 MVY241 MVY	
	or	
	LIBBE FLAPE MVY	1100–0300
Traffic entering ZBW via RBV or JFK landing ACK:		
RBV	J62 ACK	
	or	
	FLAPE CLAMY ACK	1100–0300
	or	

Terminals	Route	Effective Times (UTC)
1100–0300		
	J79 J62 ACK	
	or	
	FLAPE CLAMY ACK	1100–0300
	or	
	RIFLE DEEPO (RNAV)–STAR	1100–0300
Traffic entering ZBW via J174 or J121 landing HYA:		
J121	J121 SHLEP J62 MVY241 MVY	
	or	
	J121 SHLEP LIBBE FLAPE MVY	1100–0300
J174	J174 RIFLE J62 MVY241 MVY	
	or	
	J174 RIFLE FLAPE MVY	1100–0300
Traffic entering ZBW via J174 or J121 landing MVY:		
J121	J121 SHLEP J62 MVY241 MVY	
	or	
	J121 SHLEP LIBBE FLAPE MVY	1100–0300
J174	J174 RIFLE J62 MVY241 MVY	
	or	
	J174 RIFLE LIBBE FLAPE MVY	1100–0300
Traffic entering ZBW via J174 or J121 landing ACK:		
J121	J121 SHLEP J62 ACK	
	or	
	J121 SHLEP FLAPE CLAMY	1100–0300
J174	J174 RIFLE J62 ACK	
	or	
	J174 RIFLE FLAPE CLAMY	1100–0300
	or	
	J174 RIFLE DEEPO (RNAV)–STAR	1100–0300

HIGH ALTITUDE—SINGLE DIRECTION ROUTES

Airway	Segment Fixes	Direction Effective	Effective Times (UTC)
J6	Lancaster, PA to Little Rock, AR	Southwest	1100–0300
J8	Charleston, WV to Casanova, VA	East	1100–0300
J14	Greensboro, NC to Richmond, VA	Northeast	1100–0300
J22	Montebello, VA to Pulaski, VA	Southwest	1100–0300
J30	Joliet, IL to TRIXY Int., VA	East	1100–0300
J34	Bellaire, OH to TRIXY Int., VA	East	1100–0300
J37	Coyle, NJ to Spartanburg, SC	Southwest	1100–0300
J40	Wilmington, NC to Richmond, VA	North	1100–0300
J42	Texarkana, AR to Robbinsville, NJ	Northeast	1100–0300
J48	Pottstown, PA to Foothills, GA	Southwest	1100–0300
J51	Columbia, SC to Yardley, NJ	Northeast	1100–0300
J52	Columbia, SC to Richmond, VA	Northeast	1100–0300
J55	Florence, SC to HUBBS Int., VA	Northeast	1100–0300
J61	Philipsburg, PA to EDDYS Int., VA	South	1100–0300
J75	Modena, PA to Greensboro, NC	Southwest	1100–0300
J109	Wilmington, NC to Buffalo, NY	North	1100–0300
J134	Linden, VA to Henderson, WV	West	1100–0300
J147	Beckley, WV to Casanova, VA	Northeast	1100–0300
J149	Armel, VA to Rosewood, OH	West	1100–0300
J150	Gordonsville, VA to Hampton, NY	East	1100–0300
J162	Bellaire, OH to Martinsburg, WV	East	1100–0300
J165	Charleston, SC to Richmond, VA	North	1100–0300
J191	Wilmington, NC to Robbinsville, NJ	North	1100–0300
J193	HUBBS Int., VA to Wilmington, NC	South	1100–0300
J207	Florence, SC to Franklin, VA	Northeast	1100–0300
J208	Athens, GA to Hopewell, VA	Northeast	1100–0300
J209	Greenwood, SC to Norfolk, VA	Northeast	1100–0300
J211	Westminster, MD to Johnstown, PA	Northwest	1100–0300
J213	Beckley, WV to Armel, VA	East	1100–0300
J518	Baltimore, MD to Indian Head, PA	Northwest	1100–0300

Q–ROUTES REGULATORY

Q1, Q3, Q5, Q7, Q9 and Q11 are preferred single direction (Southbound) Q routes; flight planning Northbound not authorized.

Q routes are RNAV routes that require the use of GNSS or DME/DME/IRU RNAV, unless otherwise indicated. Please note that this section does not apply to Q routes in the Gulf of Mexico. Gulf of Mexico Q routes are explained in the Southeast and South Central A/FD volumes. Q routes listed in this AF/D volume have at least part of one of their leg segments within this volume's area of coverage.

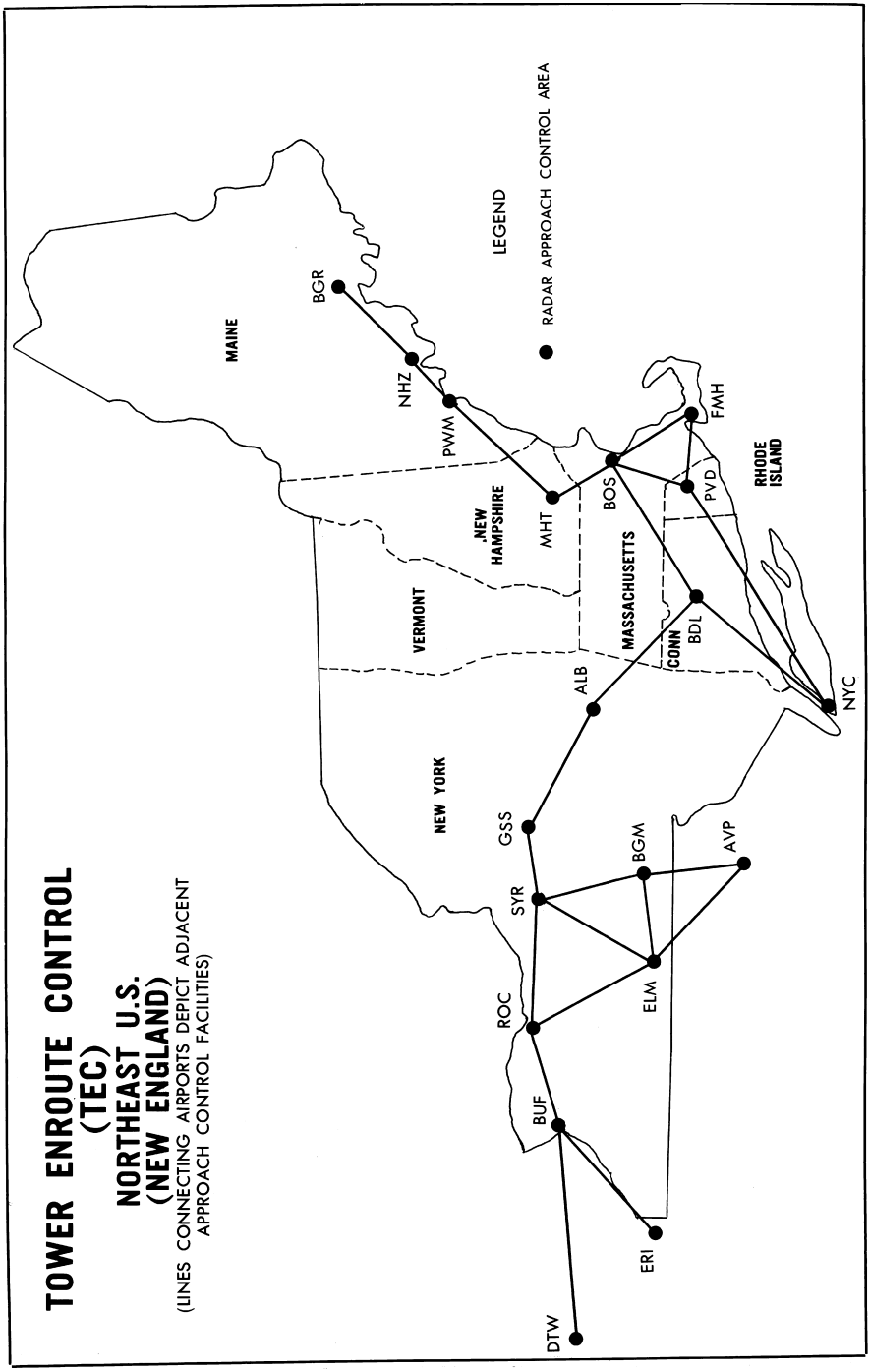
GNSS and DME/DME/IRU RNAV operations are authorized along Q routes at FL 180 and above. GNSS and DME/DME/IRU RNAV MEAs will only be published if above FL 180.

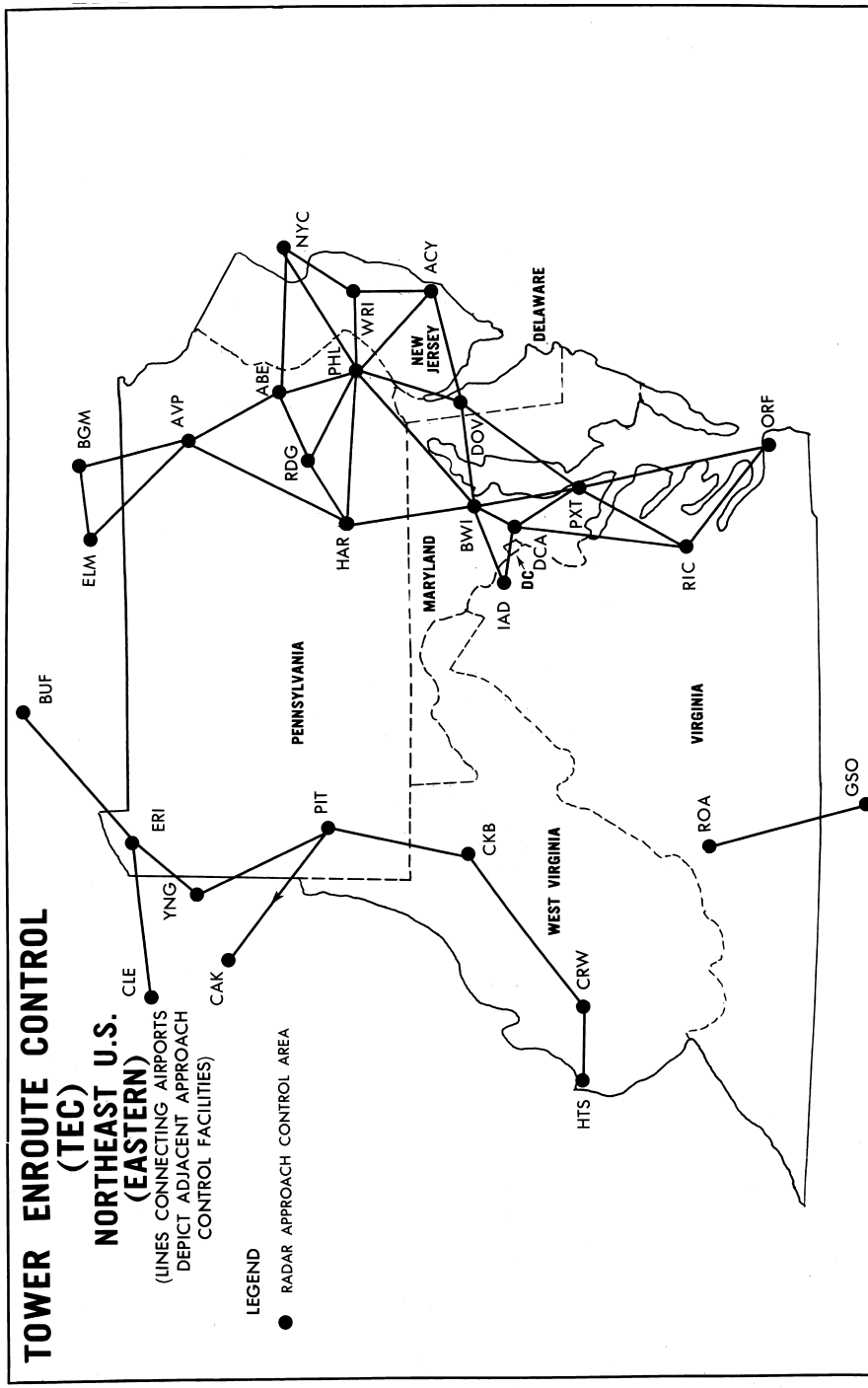
DME facilities that have been assessed for RNAV operations are listed below. Q routes with no DME facilities listed are limited to GNSS RNAV operations only. Those routes will have an enroute chart note ''GNSS REQUIRED''.

Route	Segment	DME
Q1	ELMAA–ERAVE	BTG, OLM, HQM, HUH, UBG
	ERAVE–EASON	BTG, OLM, HQM, HUH, LTJ, CVO, DSD, OED, UBG, ONP, EUG
	EASON–EBINY	CVO, DSD, OED, BTG, UBG, ONP, EUG, LMT
	EBINY–ENVIE	CVO, OED, EUG, LMT, RBL, ENI, ONP, FJS
	ENVIE–ETCHY	OED, PYE, OAK, LIN, ECA, LMT, RBL, ENI, SAC, FJS
	ETCHY–POINT REYES	LIN, ECA, RBL, ENI, SAC, OAK
Q2	BOILE–HEDVI	HEC, PDZ, OCN, PMD, LAX, RZS, IPL, TRM, PKE, BLH, EED, BZA, GBN, PXR
	HEDVI–HOBOL	BZA, GBN, BLH, EED, PXR, IPL, TFD, DRK, TUS
	HOBOL–ITUCO	TFD, GBN, BLH, PXR, TUS, CIE, SSO
	ITUCO–NEWMAN	EWM, TFD, PXR, CIE, SSO, TUS, TCS
Q3	FEPOT–FAMUK	OLM, TOU, HQM, CVO, BTG, DSD, LTJ, UBG, ONP, EUG
	FAMUK–FRFLY	BTG, DSD, OED, CVO, EUG, ONP, UBG, RBL, LMT
	FRFLY–FINER	OED, EUG, RBL, LMT, ENI, CVO, FJS
	FINER–FOWND	OED, PYE, ECA, LIN, OAK, ENI, RBL, LMT, SAC, FJS
	FOWND–POINT REYES	LIN, ECA, PYE, RBL, SAC, ENI
Q4	BOILE–HEDVI	HEC, PDZ, OCN, PMD, LAX, RZS, IPL, TRM, PKE, BLH, EED, BZA, GBN, PXR
	HEDVI–SCOLE	EED, BLH, BZA, GBN, TRM, IPL, TFD
	SCOLE–SPTFR	EED, BLH, BZA, GBN, TRM, IPL, TFD
	SPTFR–ZEBOL	EED, IPL, BZA, GBN, TFD, PXR, BLH
	ZEBOL–SKTTR	PXR, BLH, BZA, GBN, TFD, TUS, SSO, CIE, SVC, TCS
	SKTTR–EL PASO	EWM, CUS, SVC, TCS, SSO, CIE, ELP, DMN, CME
Q5	HAROB–HISKU	OLM, ONP, CVO, EUG, HQM, UBG, BTG, LTJ, DSD, HUH
	HISKU–HARPR	ONP, CVO, EUG, LTJ, DSD, UBG, BTG, RBL, OED, LMT, FJS, LKV
	HARPR–HOMEG	CVO, EUG, OED, RBL, LMT, ENI, FJS, LKV
	HOMEG–HUPTU	SAC, PYE, LIN, OAK, ECA, LMT, RBL, ENI, OED, FJS
	HUPTU–STIKM	OAK, ECA, PYE, LIN, SAC, ENI, RBL
Q7	JINMO–JOGEN	CVO, HQM, LTJ, UBG, BTG, ONP, IMB, EUG, OLM, DSD, YKM, PDT, SEA
	JOGEN–JUNEJ	LTJ, IMB, UBG, EUG, CVO, RBL, LMT, FMG, DSD, LKV, OED, BTG
	JUNEJ–JAGWA	RBL, LMT, FMG, LIN, SAC, ECA, ENI, MOD, SWR, OAK, LKV, CZQ, AVE, SNS
	JAGWA–AVENAL	OAK, MOD, ECA, EHF, PRB, AVE, SNS, CZQ
Q9	SUMMA–SMIGE	OLM, UBG, SEA, YKM, BTG, ONP, IMB, HQM, PDT, EUG, LTJ, CVO, DSD, OED, EPH, MWH
	SMIGE–SUNBE	IMB, UBG, EUG, IMB, RBL, LMT, FMG, SAC, OED, CVO, LKV, DSD, BTG
	SUNBE–REBRG	RBL, LMT, FMG, SAC, ECA, MVA, CZQ, OAK, EHF, PMD, LKV, LIN, MOD, AVE, OED, SWR
	REBRG–DERBB	CZQ, PMD, EHF, LAX, RZS, AVE, MOD, ECA
Q11	PAAGE–PAWLI	EPH, UBG, CVO, EUG, HQM, YKM, OLM, PDT, BTG, ONP, IMB, LTJ, DSD, LKV, OED, SEA
	PAWLI–PITVE	EUG, FMG, SAC, IMB, LKV, OED, DSD, RBL, LMT, CVO, REO
	PITVE–PUSHH	FMG, SAC, LIN, SWR, MOD, OAL, RBL, LKV, LMT, MVA, CZQ
	PUSHH–LOS ANGELES	SAC, ECA, FMG, LIN, OAL, MOD, EHF, LAX, PMD, PDZ, HEC, OCN, CZQ, AVE, RZS
Q13	All segments	None; GNSS required
Q15	All segments	None; GNSS required
Q19	PLESS–NASHVILLE	ENL, GQO, PXV, BNA, IIU, FAM, BWG, CSX
Q20	CORONA–HONDS	CNX, ABQ, ACH, ONM, TXO, LVS, TCC, CME
	HONDS–UNNOS	CNX, INK, CME, TXO, TCC
	UNNOS–FUSCO	FST, ACH, INK, CME, SJT, TXO, TCC
	FUSCO–JUNCTION	ABI, CWK, CSI, INK, LZZ, JCT, SJT, STV, FST
Q21	JONEZ–RAZORBACK	BYP, EOS, TUL, TXK, ADM, RZC, OKM
Q22	GUSTI–OYSTY	AEX, DAS, MCB, LLA, BTR, LCH, HRV, LFT, LEV
	OYSTY–ACMES	RQR, GCV, MCB, BTR, PCU, GPT, HRV, LEV, SJI
	ACMES–CATLN	SJI, MGM, MCB, BFM, GPT, GCV, HRV, CEW, MVC, PCU, MEI

Route	Segment	DME
Q23	FORT SMITH–RAZORBACK	OKM, RZC, EOS, TUL
Q24	LAKE CHARLES–BATON ROUGE	AEX, DAS, LCH, MCB, LFT, BTR
	BATON ROUGE–IRUBE	AEX, LEV, MCB, LCH, RQR, HRV, BTR, GCV, MCB, PCU, SJI, LBY
	IRUBE–PAYTN	GCV, MCB, JYU, PCU, MEI, HRV, CEW, SJI
Q25	MEEOW–WALNUT RIDGE	ELD, MEM, LIT, FAM, RZC
	WALNUT RIDGE–WLSUN	MEM, STL, BWG, PXV, ENL, FAM, ARG, BNA, CSX, TTH
	WLSUN–POCKET CITY	BWG, PXV, ENL, BNA, TTH
Q26	WALNUT RIDGE–DEVAC	LIT, JKS,GQO, MEM, BNA, FAM, ARG, DYR, VUZ, RMG
Q27	FORT SMITH–ZALDA	OKM, SGF, RZC, EOS, TUL
Q28	GRAZN–PYRMD	EIC, LIT, ELD, OKM, TXK
	PYRMD–HAKAT	ARG, LIT, FAM, ELD, SGF, RZC, MEM, TXK
	HAKAT–ESTEE	ARG, LIT, FAM, SGF, MEM
	ESTEE–POCKET CITY	ARG, CSX, FAM, PXV, ENL, MEM, STL, BWG, TTH, BNA
Q29	HARES–MEMPHIS	MEM, ARG, LIT, JAN, ELD, SQS
	MEMPHIS–SIDAE	MEM, PXV, BNA, BWG, ARG, ENL
	SIDAE–POCKET CITY	PXV, TTH, BWG, ENL
Q30	SIDON–VULCAN	GLH, MEM, VUZ, JAN, JYU, MEI, MGM, SQS, RMG
Q31	DHART–JODOX	SQS, LIT, TXK
	JODOX–MARVELL	SQS, LIT, ELD, MEM, ARG
	MARVELL–TIIDE	ARG, BWG, PXV, FAM, LIT, MEM, ENL, TTH
	TIIDE–POCKET CITY	BWG, PXV, ENL, TTH
Q32	EL DORADO–GAGLE	AEX, JAN, MEM, SQS, SWB, ELD, LIT, TXK
	GAGLE–CRAMM	JAN, SQS, MEM, ARG, VUZ, BNA, LIT
	CRAMM–NASHVILLE	BWG, MEM, VUZ, BNA, GQO
	NASHVILLE–SWAPP	BWG, IIU, PXV, VXV, BNA, GQO
Q33	DHART-LITTLE ROCK	AEX, ELD, LIT, TXK, SWB, ARG, MEM, SQS
	LITTLE ROCK–PROWL	ELD, SGF, FAM, LIT, ARG, MEM, RZC, CSX, STL
Q34	TEXARKANA–MATIE	LIT, SWB, TXK, BYP, EIC, ELD, SQS
	MATIE–MEMPHIS	LIT, ARG, MEM, ELD, SQS
	MEMPHIS–SWAPP	BWG, ARG, MEM, MKL, SQS,PXV, BNA, GQO, IIU, VXV
Q35	KIMBERLY–NEERO	LTJ, PDT, DSD, IMB, LKV, BOI, REO, BAM, SDO
	NEERO–WINEN	BQU, SDO, BAM, REO, BVL, ILC, DTA, ELY, CDC, MLF, BCE
	WINEN–CORKR	CDC, BCE, BLD, ILC, MLF, TBC, PGS, INW, DRK
	CORKR–DRAKE	TBC, BCE, BLD, DRK, PGS, FLG, GCN, INW, TFD
Q36	RAZORBACK–TWITS	RZC, MEM, SGF, BUM, TUL, EOS, FAM, ARG, LIT
	TWITS–DEPEC	MEM, GQO, BNA, BWG, FAM, ARG, PXV, IIU
	DEPEC–NASHVILLE	GQO, BWG, BNA, PXV, IIU
	NASHVILLE–SWAPP	VXV, BWG, BNA, GQO, PXV, IIU
Q38	ROKIT–INCIN	DAS, LCH, SWB, IAH, LFK, HUB, AEX
	INCIN–LAREY	JAN, MCB, SWB, AEX
	LAREY–BESOM	JAN, JYU, MEI, SQS, VUZ
Q40	ALEXANDRIA–DOOMS	AEX, SWB, LCH, JAN, HEZ, MCB
	DOOMS–WINAP	JAN, SQS, MEI, MCB
	WINAP–MISLE	MEI, VUZ, JYU
Q42	KIRKSVILLE–STRUK	CID, IOW, UIN, LMN, IRK, BDF, STL, DEC, ENL, CSX
	STRUK–DANVILLE	ENL, IOW, UIN, BDF, DEC, STL, CSX, SPI, TTH, BVT, JOT, VHP, OXI, ENL, OKK, OBK, GIJ, FWA, GSH, IRK
	DANVILLE–MUNCIE	GIJ, SPI, BDF, OBK, OKK, VHP, BVT, DEC, GSH, FWA, JOT, TTH, OXI, ROD, FLM
	MUNCIE–HIDON	FLM, VHP, GSH, TTH, GIJ, OKK, FWA, ROD, OXI, CRL, GSH, APE, DJB, DXO, HNN, AIR, HVQ, CXR, EWC
	HIDON–BUBAA	AIR, APE, HNN, CXR, HVQ, EWC, DJB
	BUBAA–PSYKO	AIR, APE, DJB, CXR, HNN, EWC, SLT, CSN, JHW, ETG, PSB
	PSYKO–BRNAN	PSB, JHW, EWC, AIR, ETG, CSN, EMI, SLT
	BRNAN–MAALS	EMI, SLT, CSN, EWC, PSB, ETG, SAX, RBV, HNK, HUO, SIE
	MAALS–SUZIE	ETG, EMI, CSN, HUO, SIE, JFK, PSB, SLT, HNK
	SUZIE–EAST TEXAS	JFK, EMI, PSB, SLT, HNK, SIE, RBV, SAX, HUO, CYN
	EAST TEXAS–ELIOT	HUO, RBV, EMI, CYN, SAX, JFK, PSB, HNK
Q104	DEFUN–HEVVN	PIE, PZD, CRG, SZW, TAY, JYU, CEW, MGM, OTK, CRG
	HEVVN–PLYER	PIE, ORL, OMN, SRQ, TAY, LAL, CRG, SZW, PZD
	PLYER–SWABE	PIE, ORL, OMN, SRQ, TAY
	SWABE–ST PETERSBURG	LAL, ORL, OMN, SRQ, PHK, PIE
	ST PETERSBURG–CYPRESS	PHK, PBI, SRQ, PIE, VRB, ORL, FLL, LAL, OMN

Route	Segment	DME
Q106	SMELZ–BULZI	LAL, ORL, OMN, PHK, PIE, CRG, VRB, TAY, OTK, PZD, AMG, SZW
	BULZI–DRABK	AMG, PZD, TAY, CRG, SZW, MGM, OTK, JYU, CEW, SJI
	DRABK–GADAY	MGM, PZD, OTK, JYU, SZW, CEW, SJI
Q108	GADAY–HKUNA	CEW, JYU, MGM, SZW, RRS, PZD, MAI, OTK, GEF, MGR, TAY, AMG, CRG
Q110	THNDR–JAYMC	SRQ, VRB, PHK, PIE, LAL, VKZ, ORL, PBI
	JAYMC–RVERO	VKZ, VRB, PHK, PIE, LAL, SRQ, ORL, OMN, PBI, DHP
	RVERO–KPASA	OMN, PIE, PBI, SRQ, ORL, LAL
	KPASA–BRUTS	SRQ, VRB, ORL, PHK, TAY, PIE, OMN, OTK, LAL, CRG, SZW, AMG
	BRUTS–GULFR	OMN, AMG, CRG, SZW, PIE, TAY, PZD, OTK
	GULFR–FEONA	TAY, MCN, PZD, CRG, OTK, SZW, AMG, MCN, ATL, MGM
Q112	DEFUN–HEVVN	PIE, OTK, CRG, OMN, LAL, SZW, SRQ, ORL, VRB
	HEVVN–INPIN	JYU, PZD, CEW, SZW, MGM, OTK, TAY, AMG, PIE, CRG
Q116	KPASA–BRUTS	SRQ, VRB, ORL, PHK, TAY, PIE, OMN, OTK, LAL, CRG, SZW, AMG
	BRUTS–GULFR	OMN, AMG, CRG, TAY, LAL, PZD, SZW, OTK
	GULFR–CEEYA	MCN, AMG, PZD, OTK, SZW, TAY
Q118	KPASA–BRUTS	SRQ, VRB, ORL, PHK, TAY, PIE, OMN, OTK, LAL, CRG, SZW, AMG
	BRUTS–LENIE	OMN, AMG, CRG, TAY, LAL, PZD, SZW, OTK, MCN
Q501	VIXIS–GOPHER	ECK, FNT, APN, SSM, GRR, MBL, SAW, BAE, MNM, DLL, AUW, ODI, STE, FGT,EAU, DLH, GEP, BRD, MCW, MSP, ASP, TVC, GRB, RWF
	GOPHER–SOBME	FGT, BRD, MCW, GEP, ABR, FAR, DLH, ODI, RWF, FSD
Q502	KENPA–GOPHER	SSM, FNT, ECK, APN, SAW, GRB, BAE, DLL, AUW, ODI, FGT, DLH, EAU, MCW, MSP, MNM, ASP, TVC, GEP, RWF, BRD
	GOPHER–SOBME	FGT, DLH, ODI, MCW, ABR, FAR, MSP, GEP, RWF, FSD, BRD
Q504	NOTAP–CESNA	SSM, ECK, APN, GLR, PLN, ISQ, MNM, DLL, RHI, DLH, GEP, FGT, ODI, ASP, TVC, SAW, GRB, BRD
	CESNA–HEMDI	ODI, GEP, DLH, FGT, RWF, FAR, AXN, FSD, ABR, DLL, BRD
Q505	OMAGA–RIMBE	SSM, TVC, ASP, SAW, GRB
	RIMBE–CESNA	SSM, RHI, DLL, DLH, GEP, FGT, TVC, SAW, GRB, BRD, ODI
	CESNA–HEMDI	GEP, DLH, FGT, RWF, FAR, AXN, FSD, ABR, BRD, ODI, GRB


TOWER ENROUTE CONTROL
(TEC)
NORTHEAST U.S.
(NEW ENGLAND)
(LINES CONNECTING AIRPORTS DEPICT ADJACENT APPROACH CONTROL FACILITIES)
LEGEND
RADAR APPROACH CONTROL AREA
MAINE
VERMONT
NEW HAMPSHIRE
MASSACHUSETTS
CONN
RHODE ISLAND
NEW YORK
BGR
NHZ
PWM
MHT
BOS
PVD
FMH
BDL
NYC
ALB
GSS
SYR
ROC
BUF
DTW
ERI
ELM
BGM
AVP


TOWER ENROUTE CONTROL
(TEC)
NORTHEAST U.S.
(EASTERN)
(LINES CONNECTING AIRPORTS DEPICT ADJACENT APPROACH CONTROL FACILITIES)
LEGEND
RADAR APPROACH CONTROL AREA
BUF
ERI
CLE
YNG
CAK
PIT
CKB
CRW
HTS
ELM
BGM
AVP
ABE
RDG
PHL
WRI
NYC
ACY
HAR
DOV
BWI
IAD
DC
DCA
PXT
RIC
ORF
ROA
GSO
PENNSYLVANIA
MARYLAND
NEW JERSEY
DELAWARE
WEST VIRGINIA
VIRGINIA

(TEC)

Within the national airspace system it is possible for a pilot to fly IFR from one point to another without leaving approach control airspace. This is referred to as ''tower enroute'' which allows flight beneath the enroute structure. The tower enroute concept has been expanded (where practical) by reallocating airspace vertically/geographically to allow flight planning between city pairs while remaining within approach control airspace. Pilots are encouraged to solicit tower enroute information from FSS's and to use the route descriptions provided in this directory when filing flight plans. Other airways which appear to be more direct between two points may take the aircraft out of approach control airspace thereby resulting in additional delays or other complications. All published TEC routes are designed to avoid enroute airspace and the majority are within radar coverage. Additional routes and other changes will appear in forthcoming editions as necessary. The acronym ''TEC'' should be included in the remarks section of the flight plan. This will advise ATC that the pilot intends to remain within approach control airspace for the entire flight. The following items should be noted before using the graphics and route descriptions:

1. The graphic is not to be used for navigation nor detailed flight planning. Not all city pairs are depicted. It is intended to show general geographic areas connected by tower enroute control. Pilots should refer to route descriptions for specific flight planning.
2. The route description contains four columns of information: i.e., the approach control area (listed alphabetically) within which the departure airport is located (check appropriate flight information publications), the specific route (airway, radial, etc.), the highest altitude allowed for the route, and the destination airport (listed alphabetically). Be advised, many destination airports are associated with a larger primary airport. Check the legend preceding this listing for this association.
3. The word ''DIRECT'' will appear as the route when radar vectors will be used or no airway exists. Also, this indicates that a Standard Instrument Departure (SID) or Standard Terminal Arrival Route (STAR) may be applied by ATC.
4. When a NAVAID or intersection identifier appears with no airway immediately preceding or following the identifier, the routing is understood to be DIRECT to or from that point unless otherwise cleared by ATC.
5. Routes beginning or ending with an airway indicate that the airway essentially overflies the airport or radar vectors will be applied.
6. Where more than one route is listed to the same destination, the pilot may select which route is desired. Unless otherwise stated, all routes may be flown in either direction.
7. Routes are effective only during each respective terminal facility's normal operating hours. Pilots are cautioned to check NOTAMS to ensure appropriate terminal facilities will be operating for the planned flight time.
8. All identifiers used for NAVAIDS, airports, and intersections are official identifiers.
9. Altitudes are listed in thousands of feet. ATC may require altitude changes to maintain flight within approach control airspace. ATC will provide radar monitoring and, if necessary, course guidance if the highest altitude assigned by ATC is below the Minimum Enroute Altitude (MEA).
10. Although all airports are not listed under the destination column, IFR flight may be planned to satellite airports in proximity to major airports via the same routing.
11. Flight plans should be filed with a Flight Service Station (FSS).

TOWER ENROUTE CONTROL CITY PAIRS

(1) Single Engine only.
(2) Props less than 210 KT IAS.
(3) Props less than 250 KT IAS.
(4) Jets and Props greater than 210 KT IAS.
(5) Jets and Props greater than 250 KTS IAS.

Boston—NO SATS = BED/LWM/BVY/FIT/6B6/2B2
SO SATS = BOS/OWD/1B9/3B2
Bradley = BDL/BAF/CEF/7B2
Bradley/Hartford = HFD/MMK/IJD/4B8
Bradley/Worcester = ORH/3B0/1B6
Manchester = MHT/ASH/CON/LCI
Manchester/Pease = PSM/DAW/3B4
New York/Bridgeport = BDR/HVN/OXC/3B9
Philadelphia = NO SATS = OQN/MQS/LOM/DYL/PNE/CKZ/PTW/UKT/TTN/NXX
SO SATS = ILG/EVY
Portland = PWM/IWI/NHZ/RKD
Portland/Augusta = AUG/LEW/WVL/IZG/81B
Providence = PVD/EWB/TAN/SFZ/UUU/5B3
Providence/Groton = GON/WST/BID/0B8

Approach Control Area (Including Satellites)		Route	Highest Altitude	Destination
Albany		ALB GDM V431 LOBBY	10000	Bedford
		V14 V428 V29	6000	Binghamton
		ALB GDM V431 REVER	10000	Boston
		Direct	10000	Bradley
		V130	10000	Bradley
		ALB V44 DENNA	10000	Bridgeport
		V14	10000	Buffalo
		**(3)** ALB V123 HAARP	10000	Danbury

Approach Control Area (Including Satellites)		Route	Highest Altitude	Destination
		**(4)** ALB V157 HAARP	10000	Danbury
		V14 V428	8000	Elmira
		V2	10000	Griffiss
		ALB V130 BDL GON	10000	Groton
		Direct	10000	Hartford
		ALB CTR PVD V151 GAILS	10000	Hyannis
		V14 V428	8000	Ithaca
		ALB EEN MHT	10000	Manchester
		ALB CTR V405 PVD	10000	Marthas Vineyard
		ALB CTR PVD PVD PVD167 NEWBE DEEPO	10000	Nantucket
		ALB GDM V431 LOBBY	10000	Norwood
		ALB CAM CON	10000	Portland
		ALB CON	10000	Portsmouth
		ALB CTR PVD	10000	Providence
		ALB CTR PVD V151 GAILS	10000	Provincetown
		V2	10000	Rochester
		V14 BEEPS	10000	Rochester
		ALB V123 TRESA	10000	Stewart
		ALB V130 MOLDS	10000	Worcester
Allentown		FJC V149 LHY	8000	Albany
		ETX LHY	8000	Albany
		V149 MAZIE ARD CYN	5000	Atlantic City
		V93 LRP	8000	Baltimore
		ETX V162 DUMMR V93 LRP	6000	Baltimore
		V39 LRP	8000	Baltimore
		V130	10000	Bradley
		Direct	10000	Bradley
		FJC STW	5000	Caldwell
		**(2)** ETX V30 SBJ	5000	Farmingdale
		ETX V162 HAR	8000	Harrisburg
		Direct	10000	Hartford
		ETX ETX004 WEISS	4000	Hazleton
		ETX V39	4000	Lancaster
		**(2)** ETX BWZ	5000	Newark
		**(4)** FJC BWZ	6000	Newark
		FJC V149 MAZIE ARD	5000	North Philadelphia
		**(2)** ETX V29 PTW (piston only)	4000	Philadelphia
		**(4)** FJC V149 MAIZE (turbojet only)	7000	Philadelphia
		ETX V29 PTW (turboprop only)	5000	Philadelphia
		FJC V6 SEG	8000	Pittsburgh
		ETX V30 SEG	8000	Pittsburgh
		V276 RAV	8000	Pittsburgh
		FJC RAV	8000	Pittsburgh
		ETX V39 FLOAT	4000	Reading
		ETX V164 FQM	6000	Rochester
		FJC V162 HUO	5000	Westchester Co.
		V93 LVZ	7000	Wilkes-Barre
		FJC V149 RITTY	7000	Wilkes-Barre
		ETX V29 PTW	4000	Wilmington
Atlantic City		V229 DIXIE V276 ARD	5000	Allentown
		V1 DIXIE V276 ARD (Single Engine only)	5000	Allentown
		V1 ATR V308 OTT	4000	Andrews AFB
		LEEAH V268 BAL	4000	Baltimore
		V1 JFK V229 HFD CLOWW (Single engine and /E, /F, /G only)	5000	Bangor
		V1 JFK V229 HFD CLOWW (Single engine and /E, /F, /G only)	5000	Bar Harbor
		V1 JFK V229 HFD HFD053 DREEM (Single Engine only)	5000	Boston (North)
		V1 JFK V229 HFD V3 WOONS (Single Engine only)	5000	Boston
		V1 JFK V229 HFD FOSTY WOONS (Single engine and /E, /F, /G only)	5000	Boston
		V1 JFK V229 BDR BDR014 JUDDS (Single Engine only)	5000	Bradley
		V184 ZIGGI JFK 210 JFK V229 BDR (Twins only, n/a between 1400-2100)	5000	Bridgeport
		HOWIE V1 JFK V229 BDR (Single engine only)	5000	Bridgeport
		V184 OOD DQO V469 HAR	4000	Capital City

Approach Control Area (Including Satellites)		Route	Highest Altitude	Destination
		LEEAH V268 ENO	4000	Dover
		LEEAH V268 BAL BAL294 KROLL AML (No jets)	4000	Dulles
		LEEAH V229 PXT V16 V286 CSN (Jets only)	4000	Dulles
		V268 ENO V29 AVP V147	4000	Elmira
		V1 JFK BDR MAD MAD126 MONDI (Single Engine only)	5000	Groton
		V184 OOD DQO V469	4000	Harrisburg
		V1 JFK V229 (Single engine only)	5000	Hartford
		V1 JFK V229 HFD V167 PVD V151 GAILS (Single Engine only)	5000	Hyannis
		V1 JFK CCC (Single Engine only)	5000	Islip
		V184 ZIGGI JFK210 JFK CCC (No Single Engine; n/a btn 1400-2100 local)	5000	Islip
		V1 JFK (Single Engine only)	5000	Kennedy
		V184 ZIGGI JFK210 JFK (Jets/multiengine Props only; no OTFC)	5000	Kennedy
		V1 DIXIE V276 RBV V123 NANCI (Single Engine only)	5000	LaGuardia
		V229 DIXIE V276 RBV V123 NANCI (No Single Engine)	5000	LaGuardia
		V229 DIXIE V276 RBV V123 NANCI (Jets only)	7000	LaGuardia
		V184 OOD DQO DQO319 LRP144 LRP	4000	Lancaster
		HOWIE V1 CYN	5000	McGuire AFB
		VCN V16 CYN	7000	McGuire AFB
		V229 PANZE (Helicopters only)	3000	McGuire AFB
		SIE V44 PANZE	5000	McGuire AFB
		SIE V139 HARBO	5000	McGuire AFB
		V1 JFK V229 HFD CLOWW (Single engine and /E, /F, /G only)	5000	Manchester
		V1 JFK V229 BDR MAD (Single Engine only)	5000	Meriden Markham
		V1 JFK V229 BDR MAD V475 V188 GON V374 (Single engine only)	5000	Martha's Vineyard
		V1 JFK V229 BDR MAD V475 V188 GON V58 NEWBE DEEPO (Single Engine only)	5000	Nantucket
		V229 DIXIE V276 RBV RBV005 OWBIE (Non–jets only)	5000	Newark
		V229 DIXIE V276 RBV V249 METRO	5000	Newark
		V229 DIXIE V276 RBV RBV005 OWBIE (Jets only)	6000	Newark
		V1 JFK V229 BDR MAD V475 V188 GON V374 MINNK (Single Engine only)	5000	New Bedford
		V229 DIXIE V276 ARD	5000	North Philadelphia
		ACY V184 OOD	4000	Philadelphia
		V1 JFK V229 HFD CLOWW (Single engine and /E, /F, /G only)	5000	Portland
		V1 JFK V229 BDR MAD V475 V188 GON (Single Engine only)	5000	Providence
		V1 JFK V229 HFD V167 PVD V151 GAILS (Single Engine only)	5000	Provincetown
		V1 JFK V229 BDR MAD V475 V188 GON (Single Engine only)	5000	Quonset
		V184 OOD DQO MXE MXE334 HUMEL	4000	Reading
		V1 SBY	6000	Salisbury
		SIE V139	4000	Snow Hill
		V1 ATR	6000	Snow Hill
		V1 JFK V229 BDR MAD V475 V188 GON V374 MINNK (Single Engine only)	5000	Taunton Muni
		V229 PANZE V184 ZIGGI V276 RBV V249 METRO (Turbojet only)	4000	Teterboro
		LEEAH V1 ATR V308 OTT (Props only)	4000	Washington
		V229 DIXIE V276 RBV V249 SAX V39 BREZY (Multi-engine Props only)	5000	Westchester Co.
		V1 DIXIE V276 RBV V249 SAX V39 BREZY (Multi-engine props only)	5000	Westchester Co.
		V1 JFK V229 HFD V1 GRAYM (Single Engine only)	5000	Worcester

Approach Control Area (Including Satellites)		Route	Highest Altitude	Destination
Baltimore		V93 LRP V39 ETX	7000	Allentown
		V268 LEEAH V229	7000	Atlantic City
		V268 ENO V16 JFK V229 HFD CLOWW (Single engine and /E, /F, /G only)	7000	Bangor
		V268 ENO V16 JFK V229 HFD CLOWW (Single engine and /E, /F, /G only)	7000	Bar Harbor
		V93 LRP V499	7000	Binghamton
		V268 ENO V16 JFK V229 HFD HFD053 DREEM (Single engine only)	7000	Boston (North)
		V268 ENO V16 JFK V229 HFD V3 WOONS (Single Engine only)	7000	Boston
		V268 ENO V16 JFK V229 HFD FOSTY WOONS (Single engine and /E, /F, /G only)	7000	Boston
		V268 ENO V16 JFK V229 BDR BDR014 JUDDS (Single Engine only)	7000	Bradley
		V268 ENO V16 JFK V229 BDR (Single Engine only)	7000	Bridgeport
		V31 HAR	7000	Capital City
		V268 ENO	7000	Dover AFB
		V44 MRB	6000	Dulles
		V268 ENO V16 JFK V229 BDR MAD MAD126 MONDI (Single Engine only)	7000	Groton
		EMI EMI321 HGR089 HGR	6000	Hagerstown
		V31 HAR	7000	Harrisburg
		V268 ENO V16 JFK	7000	Islip
		V268 ENO V16 JFK (Single Engine)	7000	Kennedy
		V214 DQO V479 RUUTH V123 NANCI	7000	LaGuardia
		V499 LRP	5000	Lancaster
		V214 DQO OOD V312 CYN GXU	5000	McGuire
		V268 ENO V16 JFK V229 HFD CLOWW (Single engine and /E, /F, /G only)	7000	Manchester
		V268 ENO V16 JFK V229 BDR MAD V475 V188 GON V374 MVY (Single Engine only)	7000	Martha's Vineyard
		V214 MRB	8000	Martinsburg
		V268 ENO V16 JFK V229 BDR MAD V475 V188 GON V58 NEWBE DEEPO (Single Engine only)	7000	Nantucket
		BAL V378 MXE ARD V214 METRO (-180 kts only)	5000	Newark
SO SATS		V214 DQO	7000	New Castle
		V93 PXT V16 V33 V286 STEIN	6000	Norfolk
		V419 MXE (Non turbojets only)	5000	N. Philadelphia
		V378 MXE (Non turbojets only)	5000	N. Philadelphia
NO SATS		V214 DQO (Turbojets only)	11000	N. Philadelphia
		V93 PXT	6000	Patuxent River
		V214 ODESA OOD (Non turbojets only)	7000	Philadelphia
		V214 DQO (Turbojets only)	9000	Philadelphia
		V268 ENO V16 JFK V229 HFD CLOWW (Single engine and /E, /F, /G only)	7000	Portland
		V93 PXT V16	6000	Richmond
		BAL BAL133 SBY332 SBY	7000	Salisbury
		V268 ENO V16 JFK CCC (Single Engine)	7000	Suffolk
		BAL V378 MXE V3 SBJ TEB (−180 kts only)	7000	Teterboro
		DIRECT	4000	Washington
		V93 LRP V39 V162 FJC STW SAX V39 BREZY	7000	Westchester Co
		V93 LRP ETX FJC BWZ SAX V39 BREZY	7000	Westchester Co
		V93 LVZ	7000	Wilkes Barre
Bangor		ENE LWM	10000	Bedford
		**(3)** ENE PSM PSM221 STEVO LWM	10000	Boston
		**(4)** ENE V167 SCUPP	10000	Boston
		ENE V106 GDM V229 WITNY	10000	Bradley
		CLOWW WITNY (/E, /F, /G only)	10000	Bradley
		ENE V106 GDM V229 HFD	10000	Bridgeport
		CLOWW WITNY HFD (/E, /F, /G only)	10000	Bridgeport
		AUG V39 CON	10000	Concord
		**(3)** AUG V39 GDM V229 HFD V1 MAD V475 BDR BDR288 RYMES	10000	Danbury

Approach Control Area (Including Satellites)		Route	Highest Altitude	Destination
		**(3)** CLOWW WITNY HFD V1 MAD V475 BDR BDR288 RYMES (/E, /F, /G only)	10000	Danbury
		AUG V39 GDM V14 ORW GON	10000	Groton
		AUG V39 GDM V229 HFD	10000	Hartford
		CLOWW WITNY HFD (/E,/F,/G only)	10000	Hartford
		ENE V139 TONNI	10000	Hyannis
		ENE V106 GDM V14 ORW V16 CCC	10000	Islip
		ENE V106 GDM V14 ORW V16 DPK	10000	Kennedy
		ENE MHT	10000	Manchester
		ENE V139 TONNI	10000	Marthas Vineyard
		ENE V139 TONNI	10000	Nantucket
		**(3)** CLOWW WITNY HFD V3 CMK V623 SAX (/E, /F, /G only)	10000	Newark & SATS
		**(3)** ENE V106 GDM V3 CMK V188 SAX	10000	Newark & SATS
		**(1)** CLOWW WITNY HFD V229 V188 CMK V623 SAX (/E, /F, /G only)	10000	Newark & SATS
		**(1)** ENE V106 GDM V229 SEALL V188 SAX	10000	Newark & SATS
		ENE LWM	10000	Norwood
		ENE V139 BURDY	10000	Providence
		ENE V139 TONNI	10000	Provincetown
		AUG V39 CON V93 STUBY V205 TRESA	10000	Stewart
		**(3)** CLOWW WITNY HFD V1 MAD V475 BDR BDR288 RYMES (/E, /F,/G only)	10000	White Plains
		ENE V106 GDM V229 SPENO	10000	Worcester
Binghamton		V29 LVZ V613	8000	Allentown
		V252 GEE V14	8000	Buffalo
		V270	8000	Elmira
		V423	8000	Ithaca
		V29 LVZ V613 FJC ARD	8000	N. Philadelphia
		V29 PTW	8000	Philadelphia
		V423 ITH	8000	Rochester
		V29	8000	Syracuse
		V29 LVZ V226 MUGZY	8000	Teterboro
		V29	8000	Wilkes-Barre
Boston		GLYDE V270 CTR	10000	Albany
NO SATS		**(1)** V419 V14 ORW V16 JFK V229	10000	Atlantic City
SO SATS		**(1)** V268 HTO CCC V16 V229	10000	Atlantic City
NO SATS		V419 V14 ORW V308 BRIGS	10000	Atlantic City
SO SATS		V268 BRIGS	10000	Atlantic City
		PSM ENE	10000	Augusta
NO SATS		**(1)** V419 V14 ORW V16 V44 V268	10000	Baltimore
SO SATS		**(1)** V268 HTO CCC V16 V44 V268	10000	Baltimore
NO SATS		V419 V14 ORW HTO V268	10000	Baltimore
SO SATS		V268	10000	Baltimore
		PSM ENE BGR	10000	Bangor
		PSM ENE	10000	Bar Harbor
		BOSOX V419 WITNY	10000	Bradley
NO SATS		BOSOX V1 HFD	10000	Bridgeport
SO SATS		V268 SEY V34 CREAM	10000	Bridgeport
		V270 CTR V146 V14	10000	Buffalo
		MHT V141	10000	Burlington
		MHT CON	10000	Concord
		**(3)** BOSOX V1 MAD V475 BDR BDR288 RYMES	10000	Danbury
		**(5)** GLYDE BAF IGN V157 HAARP	10000	Danbury
NO SATS		**(1)** V419 V14 ORW V16 ENO	10000	Dover AFB
SO SATS		**(1)** V268 HTO CCC V16 ENO	10000	Dover AFB
NO SATS		V419 V14 ORW HTO V268 ENO	10000	Dover AFB
SO SATS		V268 ENO	10000	Dover AFB
		GLYDE V270	10000	Elmira
		GLYDE V270	10000	Erie
		PVD	10000	Groton
NO SATS		BOSOX V1 HFD	10000	Hartford
		DRUNK V141 GAILS	10000	Hyannis
NO SATS		V419 V14 ORW V16 CCC	10000	Islip
SO SATS		V268 HTO V46 CCC	10000	Islip
		MHT	10000	Keene
NO SATS		V419 V14 ORW V16 DPK	10000	Kennedy
SO SATS		V268 HTO V46 DPK	10000	Kennedy
		**(3)** BOSOX V1 MAD V475	10000	LaGuardia

Approach Control Area (Including Satellites)		Route	Highest Altitude	Destination
		MHT	10000	Lebanon
		MHT	10000	Manchester
		MVY359035 MVY	10000	Martha's Vineyard
NO SATS		**(1)** V419 V14 ORW V16 CYN	10000	McGuire AFB
SO SATS		**(1)** V268 HTO CCC V16 CYN	10000	McGuire AFB
NO SATS		V419 V14 ORW V308 DRIFT V312 CYN	10000	McGuire AFB
SO SATS		V268 DRIFT V312 CYN	10000	McGuire AFB
		DRUNK V141	10000	Nantucket
		**(1)** BOSOX V1 HFD V229 SEALL V188 CMK V623 SAX	10000	Newark & SATS
		**(3)** BOSOX V1 HFD V3 CMK V623 SAX	10000	Newark & SATS
NO SATS		BOSOX V1 HFD	10000	New Haven
SO SATS		V268 SEY V34 CREAM	10000	New Haven
NO SATS		**(1)** V419 V14 ORW V16 DIXIE V276 ARD	10000	N.E. Philadelphia
SO SATS		**(1)** V268 HTO CCC V16 DIXIE V276 ARD	10000	N.E. Philadelphia
NO SATS		V419 V14 ORW V308 MANTA V276 ARD	10000	N.E. Philadelphia
SO SATS		V268 MANTA V276 ARD	10000	N.E. Philadelphia
NO SATS		**(1)** V419 V14 ORW V16 VCN OOD	10000	Philadelphia
SO SATS		**(1)** V268 HTO CCC V16 VCN OOD	10000	Philadelphia
NO SATS		V419 V14 ORW V308 BRIGS ACY V184 OOD	10000	Philadelphia
SO SATS		V268 BRIGS ACY V184 OOD	10000	Philadelphia
		PSM ENE	10000	Portland
		Direct	10000	Portsmouth
		Direct	10000	Providence
		Direct	10000	Provincetown
NO SATS		**(1)** V419 V14 ORW V16	10000	Richmond
SO SATS		**(1)** V268 HTO CCC V16	10000	Richmond
NO SATS		V419 V14 ORW HTO V268 ENO V16	10000	Richmond
SO SATS		V268 ENO V16	10000	Richmond
		BOSOX V419 BDL V205 TRESA	10000	Stewart
		MHT V490 UCA	10000	Syracuse
NO SATS		**(1)** V419 V14 ORW V16 DIXIE V276 RBV	10000	Trenton
SO SATS		**(1)** V268 HTO CCC V16 DIXIE V276 RBV	10000	Trenton
NO SATS		V419 V14 ORW V308 MANTA V276 RBV	10000	Trenton
SO SATS		V268 MANTA V276 RBV	10000	Trenton
		**(3)** BOSOX V1 MAD V475 BDR BDR288 RYMES	10000	White Plains
NO SATS		V419 V14 ORW V16 CREAM HTO	10000	Westhampton Bch
NO SATS		V268 HTO	10000	Westhampton Bch
		Direct	10000	Worcester
Boston ARTCC/Keene		GDM V431 LOBBY	10000	Bedford
		V431 REVER	10000	Boston
		Direct	10000	Bradley
		GDM V229 HFD	10000	Bridgeport
		**(3)** GDM V229 HFD V1 MAD V475 BDR BDR288 RYMES	10000	Danbury
		GDM V14 ORW GON	10000	Groton
		GDM V229 HFD	10000	Hartford
		GDM V151 GAILS	10000	Hyannis
		GDM V151 PVD V405 MVY	10000	Marthas Vineyard
		GDM V151 PVD PVD167 NEWBE DEEPO	10000	Nantucket
		GDM V431 LOBBY	10000	Norwood
		GDM V151 PVD	10000	Providence
		GDM V151 GAILS	10000	Provincetown
		CTR V93 STUBY V205 TRESA	10000	Stewart
		GDM V229 SPENO	10000	Worcester
Boston ARTCC/Lebanon		LEB LEB167 BASUU (BED/FIT/6B6) or V141 CON LWM (BVY/LWM/2B2)	10000	Bedford
		V141 CON CON135 TOMIE LWM	10000	Boston
		EEN	10000	Bradley
		V151 GDM V229 HFD	10000	Bridgeport
		V151 GDM V229 HFD V1 MAD V475 BDR BDR288 RYMES	10000	Danbury
		V151 GDM V14 ORW GON	10000	Groton
		V151 GDM V229 HFD	10000	Hartford
		V141 CON LWM BOS GAILS	10000	Hyannis
		V141 CON LWM BOS	10000	Marthas Vineyard
		V141 CON LWM BOS LFV	10000	Nantucket
		LEB LEB167 BASUU	10000	Norwood
		V151 PVD	10000	Providence

Approach Control Area (Including Satellites)		Route	Highest Altitude	Destination
		V141 CON LWM BOS	10000	Provincetown
		V151 GDM V229 SPENO	10000	Worcester
Bradley		DIRECT	10000	Albany
		PWL V106 WEETS HUO V162	5000	Allentown/Harrisburg
		**(1)** GON CCC V16 JFK V229	10000	Atlantic City
		GON HTO V308 BRIGS	10000	Atlantic City
		EEN V93 CON	10000	Augusta
		**(1)** GON CCC V16 ENO V268	10000	Baltimore
		GON HTO V268	10000	Baltimore
		EEN V93 CON V39 AUG	10000	Bangor
		EEN V93 ENE	10000	Bar Harbor
		GRAYM HFD053 DREEM	10000	Bedford & NO SATS
		PUT PUT 105 WOONS	10000	Boston & SO SATS
		HFD	10000	Bridgeport
		ALB V14	10000	Buffalo
		EEN V93 CON	10000	Concord
		**(3)** HFD V1 MAD V475 BDR BDR288 RYMES	10000	Danbury
		**(5)** V405 VEERS IGN V157 HAARP	10000	Danbury
		**(1)** GON CCC V16 ENO	10000	Dover AFB
		GON HTO V268 ENO	10000	Dover AFB
		CTR V270	10000	Elmira
		CTR V270	10000	Erie
		HFD GON	10000	Groton
		PVD V151 GAILS	10000	Hyannis
		GON CCC	10000	Islip
		DIRECT	10000	Keene
		GON CCC V16 DPK	10000	Kennedy
		**(3)** HFD V1 MAD V475	10000	LaGuardia
		EEN V151	10000	Lebanon
		EEN	10000	Manchester
		PVD V405 MVY	10000	Marthas Vineyard
		**(1)** GON CCC V16 CYN	10000	McGuire AFB
		GON HTO V308 DRIFT V312 CYN	10000	McGuire AFB
		PVD PVD167 NEWBE DEEPO	10000	Nantucket
		**(1)** HFD V229 SEALL V188 CMK V623 SAX	10000	Newark & SATS
		**(3)** HFD V3 CMK V623 SAX	10000	Newark & SATS
		**(1)** GON CCC V16 DIXIE V276 ARD	10000	N.E. Philadelphia
		GON HTO V308 MANTA V276 ARD	10000	N.E. Philadelphia
		PUT PUT105 WOONS	10000	Norwood
		**(1)** GON CCC V16 VCN OOD	10000	Philadelphia
		GON HTO V308 BRIGS ACY V184 OOD	10000	Philadelphia
		EEN	10000	Portland
		**(3)** VAPER V39 GDM V106 RAYMY	10000	Portsmouth
		**(5)** EEN	10000	Portsmouth
		DIRECT	10000	Providence
		PVD V151 GAILS	10000	Provincetown
		**(1)** GON CCC V16	10000	Richmond
		GON HTO V268 ENO V16	10000	Richmond
		ALB	10000	Rochester
		VEERS V205 TRESA	10000	Stewart
		ALB	10000	Syracuse
		**(1)** GON CCC V16 DIXIE V276 RBV	10000	Trenton
		GON HTO V308 MANTA V276 RBV	10000	Trenton
		GON HTO	10000	Westhampton Beach
		**(3)** HFD V1 MAD V475 BDR BDR288 RYMES	10000	White Plains
		PWL V106 LHY	5000	Wilkes-Barre
Bradley/Hartford		DIRECT	10000	Albany
		PWL V106 WEETS HUO V162	5000	Allentown/Harrisburg
		**(1)** GON CCC V16 JFK V229	10000	Atlantic City
		GON HTO V308 BRIGS	10000	Atlantic City
		HFD V229 GDM V39 CON	10000	Augusta
		HFD CLOWW (/E, /F, /G only)	10000	Augusta
		**(1)** GON CCC V16 ENO V268	10000	Baltimore
		GON HTO V268	10000	Baltimore
		HFD V229 GDM V39 AUG	10000	Bangor
		HFD CLOWW (/E, /F, /G only)	10000	Bangor
		HFD V229 GDM V106 ENE	10000	Bar Harbor
		HFD CLOWW (/E, /F, /G only)	10000	Bar Harbor
		HFD HFD053 DREEM	10000	Bedford & NO SATS

Approach Control Area (Including Satellites)		Route	Highest Altitude	Destination
		HFD V3 WOONS	10000	Boston & SO SATS
		DIRECT	10000	Bridgeport
		ALB V14	10000	Buffalo
		HFD V229 GDM V39 CON	10000	Concord
		HFD CLOWW (/E, /F, /G only)	10000	Concord
		**(3)** HFD V1 MAD V475 BDR BDR288 RYMES	10000	Danbury
		**(5)** BDL V405 VEERS IGN V157 HAARP	10000	Danbury
		**(1)** GON CCC V16 ENO	10000	Dover AFB
		GON HTO V268 ENO	10000	Dover AFB
		CTR V270	10000	Elmira
		CTR V270	10000	Erie
		HFD GON	10000	Groton
		HFD V167 PVD V151 GAILS	10000	Hyannis
		GON CCC	10000	Islip
		HFD V229 GDM	10000	Keene
		GON CCC V16 DPK	10000	Kennedy
		**(3)** HFD V1 MAD V475	10000	LaGuardia
		HFD V229 GDM V151	10000	Lebanon
		HFD V229 GDM V106 MHT	10000	Manchester
		HFD CLOWW (/E, /F, /G only)	10000	Manchester
		GON V374 MVY	10000	Marthas Vineyard
		**(1)** GON CCC V16 CYN	10000	McGuire AFB
		GON HTO V308 DRIFT V312 CYN	10000	McGuire AFB
		GON V58 NEWBE DEEPO	10000	Nantucket
		**(1)** HFD V229 SEALL V188 CMK V623 SAX	10000	Newark & SATS
		**(3)** HFD V3 CMK V623 SAX	10000	Newark & SATS
		**(1)** GON CCC V16 DIXIE V276 ARD	10000	N.E. Philadelphia
		GON HTO V308 MANTA V276 ARD	10000	N.E. Philadelphia
		PUT PUT105 WOONS	10000	Norwood
		**(1)** GON CCC V16 VCN OOD	10000	Philadelphia
		GON HTO V308 BRIGS ACY V184 OOD	10000	Philadelphia
		HFD V229 GDM V106 ENE	10000	Portland
		HFD CLOWW (/E, /F, /G only)	10000	Portland
		HFD V229 GDM V106 RAYMY	10000	Portsmouth
		HFD CLOWW (/E, /F, /G only)	10000	Portsmouth
		HFD V167 PVD	10000	Providence
		PVD V151 GAILS	10000	Provincetown
		**(1)** GON CCC V16	10000	Richmond
		GON HTO V268 ENO V16	10000	Richmond
		ALB	10000	Rochester
		VEERS V205 TRESA	10000	Stewart
		ALB	10000	Syracuse
		**(1)** GON CCC V16 DIXIE V276 RBV	10000	Trenton
		GON HTO V308 MANTA V276 RBV	10000	Trenton
		GON HTO	10000	Westhampton Beach
		**(3)** HFD V1 MAD V475 BDR BDR288 RYMES	10000	White Plains
		PWL V106 LHY	5000	Wilkes-Barre
Bradley/Worcester		CTR	10000	Albany
		PWL V106 WEETS HUO V162	5000	Allentown/Harrisburg
		**(1)** ORW V16 JFK V229	10000	Atlantic City
		ORW HTO V308 BRIGS	10000	Atlantic City
		GDM V93 CON	10000	Augusta
		**(1)** ORW V16 ENO V268	10000	Baltimore
		ORW HTO V268	10000	Baltimore
		GDM V39 AUG	10000	Bangor
		GDM V106 ENE	10000	Bar Harbor
		DREEM	10000	Bedford & NO SATS
		PUT PUT105 WOONS	10000	Boston & SO SATS
		HFD	10000	Bridgeport
		CTR ALB V14	10000	Buffalo
		GDM	10000	Concord
		**(3)** HFD V1 MAD V475 BDR BDR288 RYMES	10000	Danbury
		**(5)** BAF IGN V157 HAARP	10000	Danbury
		**(1)** ORW V16 ENO	10000	Dover AFB
		ORW HTO V268 ENO	10000	Dover AFB
		CTR V270	10000	Elmira
		CTR V270	10000	Erie
		ORW GON	10000	Groton
		PUT V151 GAILS	10000	Hyannis
		ORW V16 CCC	10000	Islip

Approach Control Area (Including Satellites)		Route	Highest Altitude	Destination
		GDM	10000	Keene
		ORW V16 DPK	10000	Kennedy
		**(3)** HFD V1 MAD V475	10000	LaGuardia
		GDM V151	10000	Lebanon
		GDM V106 MHT	10000	Manchester
		PUT V151 PVD V405 MVY	10000	Marthas Vineyard
		**(1)** ORW V16 CYN	10000	McGuire AFB
		ORW V308 DRIFT V312 CYN	10000	McGuire AFB
		PUT V151 PVD PVD167 NEWBE DEEPO	10000	Nantucket
		**(1)** HFD V229 SEALL V188 CMK V623 SAX	10000	Newark & SATS
		**(3)** HDF V3 CMK V623 SAX	10000	Newark & SATS
		**(1)** ORW V16 DIXIE V276 ARD	10000	N.E. Philadelphia
		ORW V308 MANTA V276 ARD	10000	N.E. Phildelphia
		PUT PUT105 WOONS	10000	Norwood
		**(1)** ORW V16 VCN OOD	10000	Philadelphia
		ORW V308 BRIGS ACY V184 OOD	10000	Philadelpia
		GDM V106 ENE	10000	Portland
		GDM V106 RAYMY	10000	Portsmouth
		PUT PVD	10000	Providence
		PUT V151 GAILS	10000	Provincetown
		**(1)** ORW V16	10000	Richmond
		ORW HTO V268 ENO V16	10000	Richmond
		CTR ALB	10000	Rochester
		VEERS V205 TRESA	10000	Stewart
		CTR ALB	10000	Syracuse
		**(1)** ORW V16 DIXIE V276 RBV	10000	Trenton
		ORW V308 MANTA V276 RBV	10000	Trenton
		ORW HTO	10000	Westhampton Beach
		**(3)** HFD V1 MAD V475 BDR BDR288 RYMES	10000	White Plains
		PWL V106 LHY	5000	Wilkes-Barre
Bridgeport (See New York/Bridgeport)				
Buffalo		V2	10000	Detroit
		V14	10000	Erie
		V115	10000	Jamestown
		V2	10000	Rochester
Burlington		CAM	10000	Albany
		V141 LEB LEB167 BASUU	10000	Bedford
		V141 CON LWM	10000	Beverly
		**(3)** V141 CON TOMIE LWM	10000	Boston
		EEN	10000	Bradley
		ALB V44 DENNA	10000	Bridgeport
		**(3)** ALB V123 HAARP	10000	Danbury
		**(4)** ALB V157 HAARP	10000	Danbury
		V229 GDM V14 ORW GON	10000	Groton
		V229 HFD	10000	Hartford
		V141 CON LWM BOS GAILS	10000	Hyannis
		V141 CON LWM BOS	10000	Marthas Vineyard
		V141 CON LWM BOS LFV	10000	Nantucket
		V229 SPENO	10000	Norwich
		V141 LEB LEB167 BASUU	10000	Norwood
		V229 GDM V151 PVD	10000	Providence
		V141 CON LWM BOS	10000	Provincetown
		ALB V123 TRESA	10000	Stewart
Cape/Hyannis		PVD V146	10000	Albany
		MVY MVY230 V34 SEY HTO V308 BRIGS	10000	Atlantic City
		**(1)** MINNK V374 GON CCC V16 JFK V229	10000	Atlantic City
		FREDO BOS PSM ENE	10000	Augusta
		MVY MVY230 V34 SEY HTO V268	10000	Baltimore
		**(1)** MINNK V374 GON CCC V16 ENO V268	10000	Baltimore
		FREDO BOS PSM ENE BGR	10000	Bangor
		FREDO BOS PSM ENE	10000	Bar Harbor
		FREDO	10000	Bedford
		FREDO	10000	Boston & Sats
		PVD V405 BDL	10000	Bradley
		(water) MVY MVY230 V34 SEY HTO HTO302 KEYED	10000	Bridgeport

Approach Control Area (Including Satellites)		Route	Highest Altitude	Destination
		(land) MINNK V374 CREAM	10000	Bridgeport
		PVD V146 ALB V14	10000	Buffalo
		PVD V151 GDM V229	10000	Burlington
		FREDO BOS MHT CON	10000	Concord
		**(3)** PVD HFD V1 MAD V475 BDR BDR288 RYMES	10000	Danbury
		**(5)** PVD V146 BAF V157 HAARP	10000	Danbury
		MVY MVY230 V34 SEY HTO V268 ENO	10000	Dover AFB
		**(1)** MINNK V374 GON CCC V16 ENO	10000	Dover AFB
		PVD V146 CTR V270	10000	Elmira
		PVD V146 CTR V270	10000	Erie
		**(5)** MVY MVY230 V34 SEY V268 HTO V46 DPK	10000	Farmingdale
		**(1)** MINNK V374 GON CCC V16 DPK	10000	Farmingdale
		Direct	10000	Groton
		PVD HFD	10000	Hartford
		**(5)** MVY MVY230 V34 SEY V268 HTO V46 CCC	10000	Islip
		**(1)** MINNK V374 GON CCC	10000	Islip
		PVD V151 GDM	10000	Keene
		**(5)** MVY MVY230 V34 SEY HTO V46 DPK	10000	Kennedy
		**(1)** MINNK V374 GON CCC V16 DPK	10000	Kennedy
		PVD V167 HFD VI MAD V475	10000	LaGuardia
		PVD V151	10000	Lebanon
		FREDO BOS	10000	Manchester
		MVY MVY230 V34 SEY HTO V308 DRIFT V312 CYN	10000	McGuire AFB
		**(1)** MINNK V374 GON CCC V16 CYN	10000	McGuire AFB
		**(1)** PVD V167 HFD V229 SEALL V188 CMK V623 SAX	10000	Newark & SATS
		**(3)** PVD V167 HFD V3 CMK V623 SAX	10000	Newark & SATS
		MVY MVY230 V34 SEY V268 HTO V46 CCC V16 DIXIE V276 ARD	10000	N.E. Philadelphia
		**(1)** MINNK V374 GON CCC V16 DIXIE V276 ARD	10000	N.E. Philadelphia
		FREDO	10000	Norwood
		MVY MVY230 V34 SEY HTO V308 BRIGS ACY V184 OOD	10000	Philadelphia
		**(1)** MINNK V374 GON CCC V16 VCN OOD	10000	Philadelphia
		FREDO BOS PSM ENE	10000	Portland
		FREDO BOS	10000	Portsmouth
		Direct	10000	Providence
		MVY MVY230 V34 SEY HTO V308 CHOPS V16	10000	Richmond
		**(1)** MINNK V374 GON CCC V16	10000	Richmond
		PVD V146 ALB	10000	Rochester
		PVD V405 BDL V205 TRESA	10000	Stewart
		PVD V146 ALB	10000	Syracuse
		MVY MVY230 V34 SEY HTO V308 MANTA V276 RBV	10000	Trenton
		**(1)** MINNK V374 GON CCC V16 DIXIE V276 ARD	10000	Trenton
		**(5)** MVY MVY230 V34 SEY V268 HTO V46 CCC	10000	Westhampton Beach
		**(1)** MINNK V374 GON CCC	10000	Westhampton Beach
		PVD V167 HFD V1 MAD V475 BDR BDR288 RYMES	10000	White Plains
		PVD PUT	10000	Worcester
Cape/Martha's Vineyard		PVD V146	10000	Albany
		MVY MVY230 V34 SEY HTO V308 BRIGS	10000	Atlantic City
		**(1)** V374 GON CCC V16 JFK V229	10000	Atlantic City
		MVY MVY230 V34 SEY HTO V268	10000	Baltimore
		**(1)** V374 GON CCC V16 ENO V268	10000	Baltimore
		FREDO BOS PSM ENE	10000	Bar Harbor
		FREDO	10000	Boston & SATS
		PVD V405 BDL	10000	Bradley
		MVY MVY230 V34 SEY HTO HTO302 KEYED (water)	10000	Bridgeport
		(land) V374 CREAM	10000	Bridgeport
		PVD V146 ALB V14	10000	Buffalo
		PVD V151 GDM V229	10000	Burlington
		FREDO BOS MHT CON	10000	Concord
		**(3)** PVD HFD V1 MAD V475 BDR BDR288 RYMES	10000	Danbury
		**(5)** MVY V146 BAF IGN V157 HAARP	10000	Danbury

Approach Control Area (Including Satellites)		Route	Highest Altitude	Destination
		**(1)** MVY MVY230 V34 SEY HTO V268 ENO	10000	Dover AFB
		**(1)** V374 GON CCC V16 ENO	10000	Dover AFB
		PVD V146 CTR V270	10000	Elmira
		PVD V146 CTR V270	10000	Erie
		**(5)** MVY MVY230 V34 SEY V268 HTO V46 DPK	10000	Farmingdale
		**(1)** V374 GON CCC V16 DPK	10000	Farmingdale
		Direct	10000	Groton
		MVY MVY230 V58 HFD	10000	Hartford
		**(5)** MVY MVY230 V34 SEY V268 HTO V46 CCC	10000	Islip
		**(1)** V374 GON CCC	10000	Islip
		PVD V151 GDM	10000	Keene
		**(5)** MVY MVY230 V34 SEY V268 HTO V46 DPK	10000	Kennedy
		**(1)** V374 GON CCC V16 DPK	10000	Kennedy
		PVD V167 HFD V1 MAD V475	10000	LaGuardia
		PVD V151	10000	Lebanon
		FREDO BOS MHT	10000	Manchester
		MVY MVY230 V34 SEY HTO V308 DRIFT V312 CYN	10000	McGuire AFB
		**(1)** V374 GON CCC V16 CYN	10000	McGuire AFB
		**(1)** PVD V167 HFD V229 V188 CMK V623 SAX	10000	Newark & SATS
		**(3)** PVD V167 HFD V3 CMK V623 SAX	10000	Newark & SATS
		MVY MVY230 V34 SEY HTO V308 MANTA V276 ARD	10000	N.E. Philadelphia
		**(1)** V374 GON CCC V16 DIXIE V276 ARD	10000	N.E. Philadelphia
		FREDO	10000	Norwood
		MVY MVY230 V34 SEY HTO V308 BRIGS ACY V184 OOD	10000	Philadelphia
		**(1)** V374 GON CCC V16 VCN OOD	10000	Philadelphia
		FREDO BOS PSM ENE	10000	Portland
		FREDO BOS PSM	10000	Portsmouth
		Direct	10000	Providence
		MVY MVY230 V34 SEY HTO V308 CHOPS V16	10000	Richmond
		**(1)** V374 GON CCC V16	10000	Richmond
		PVD V146 ALB	10000	Rochester
		PVD V405 BDL V205 STUBY	10000	Stewart
		PVD V146 ALB	10000	Syracuse
		MVY MVY230 V34 SEY HTO V308 MANTA V267 RBV	10000	Trenton
		**(1)** V374 GON CCC V16 DIXIE V276 ARD	10000	Trenton
		MVY MVY230 V34 SEY V268 HTO V46 CCC	10000	Westhampton Beach
		**(1)** V374 GON CCC	10000	Westhampton Beach
		PVD V167 HFD V1 MAD V475 BDR BDR288 RYMES	10000	White Plains
		PVD PUT	10000	Worcester
Cape/Nantucket		ACK 146	10000	Albany
		ACK V34 SEY HTO V308 BRIGGS	10000	Atlantic City
		**(1)** ACK V146 MVY V374 GON CCC V16 JFK V229	10000	Atlantic City
		ACK FREDO BOS PSM ENE	10000	Augusta
		ACK V34 SEY HTO V268	10000	Baltimore
		**(1)** ACK V146 MVY V374 GON CCC V16 ENO V268	10000	Baltimore
		ACK FREDO BOS PSM ENE BGR	10000	Bangor
		ACK FREDO BOS PSM ENE	10000	Bar Harbor
		ACK FREDO	10000	Bedford
		ACK FREDO	10000	Boston & SATS
		ACK V146 PVD V405 BDL	10000	Bradley
		ACK V34 SEY HTO HTO302 KEYED (water)	10000	Bridgeport
		(land) ACK V146 MVY V374 CREAM	10000	Bridgeport
		ACK V146 ALB V14	10000	Buffalo
		ACK V146 PVD V151 GDM V229	10000	Burlington
		ACK FREDO BOS MHT CON	10000	Concord
		**(3)** ACK V146 PVD HFD V1 MAD V475 BDR BDR288 RYMES	10000	Danbury
		**(5)** ACK V146 BAF IGN V157 HAARP	10000	Danbury
		ACK V34 SEY HTO V268 ENO	10000	Dover AFB
		**(1)** ACK V146 MVY V374 GON CCC V16 ENO	10000	Dover AFB
		ACK V146 CTR V270	10000	Elmira
		ACK V146 CTR V270	10000	Erie

Approach Control Area (Including Satellites)		Route	Highest Altitude	Destination
		**(5)** ACK V34 SEY V268 HTO V46 DPK	10000	Farmingdale
		**(1)** ACK V146 MVY V374 GON CCC V16 DPK	10000	Farmingdale
		ACK	10000	Groton
		ACK V58 HFD	10000	Hartford
		**(5)** ACK V34 SEY V268 HTO V46 CCC	10000	Islip
		**(1)** ACK V146 MVY V374 GON CCC	10000	Islip
		ACK V146 PVD V151 GDM	10000	Keene
		**(5)** ACK V34 SEY V268 HTO V46 DPK	10000	Kennedy
		**(1)** ACK V146 MVY V374 GON CCC V16 DPK	10000	Kennedy
		ACK V146 PVD V167 HFD V1 MAD V475	10000	La Guardia
		ACK V146 PVD V151	10000	Lebanon
		ACK FREDO BOS MHT	10000	Manchester
		ACK V34 SEY HTO V308 DRIFT V312 CYN	10000	McGuire AFB
		**(1)** ACK V146 MVY V374 GON CCC V16 CYN	10000	McGuire AFB
		**(1)** ACK V146 PVD V167 HFD V229 V188 CMK V623 SAX	10000	Newark & SATS
		**(3)** ACK V146 PVD V167 HFD V3 CMK V623 SAX	10000	Newark & SATS
		ACK V34 SEY HTO V308 MANTA V276 ARD	10000	N.E. Philadelphia
		**(1)** ACK V146 MVY V374 GON CCC V16 DIXIE V276 ARD	10000	N.E. Philadelphia
		ACK FREDO	10000	Norwood
		ACK V34 SEY HTO V308 BRIGS ACY V184 OOD	10000	Philadelphia
		**(1)** ACK V146 MVY V374 GON CCC V16 VCN OOD	10000	Philadelphia
		ACK FREDO BOS PSM ENE	10000	Portland
		ACK FREDO BOS PSM	10000	Portsmouth
		ACK V146 PVD	10000	Providence
		ACK V34 SEY HTO V308 CHOPS V16	10000	Richmond
		**(1)** ACK V146 MVY V374 GON CCC V16	10000	Richmond
		ACK V146 PVD V405 BDL V205 TRESA	10000	Stewart
		ACK V146 ALB	10000	Syracuse
		ACK V34 SEY HTO V308 MANTA V276 RBV	10000	Trenton
		**(1)** ACK V146 MVY V374 GON CCC V16 DIXIE V276 ARD	10000	Trenton
		**(5)** ACK V34 SEY V268 HTO	10000	Westhampton Beach
		**(1)** ACK V146 MVY V374 GON CCC	10000	Westhampton Beach
		ACK V146 PVD V167 HFD V1 MAD V475 BDR BDR288 RYMES	10000	White Plains
		ACK V146 PUT	10000	Worcester
Charleston		V35	9000	Clarksburg
		V4	9000	Elkins
		HVQ HVQ268 KIRRK	10000	Huntington
Clarksburg		V35	10000	Charleston
		V37 EKN V4	10000	Charleston
		V35	8000	Morgantown
		V37 (OTFC only)	8000	Pittsburgh
Dover AFB		ENO V268 LEEAH	7000	Atlantic City
		ENO V268 SWANN	6000	Baltimore
		V16 JFK V229 BDR (Single Engine only)	7000	Bridgeport
		ENO V16 HEDGE	3000	Easton
		V16 JFK V229 (Single Engine only)	7000	Hartford
		ENO V16 CYN	7000	McGuire AFB
		ENO V29 SBY V1	6000	Norfolk
		ENO V16	6000	Patuxent River
		ENO V29 PXT063 PXT	4000	Patuxent River
		ENO V29 DQO	5000	Philadelphia
		ENO V29	6000	Salisbury
		ENO V16 V308 OTT	6000	Washington
		ENO V29 DQO	5000	Wilmington
Dulles		DIRECT	4000	Baltimore
		MRB V214 WOOLY EMI V419 MXE ARD V214 METRO (−180 kts)	7000	Newark
		MRB V214 WOOLY EMI V419 MXE V3 SBJ TEB METRO (−180 kts only)	7000	Teterboro
		DIRECT	3000	Washington

Approach Control Area (Including Satellites)	Route	Highest Altitude	Destination
Elmira	V428 V14	8000	Albany
	V72	8000	Binghamton
	V147	8000	Rochester
	V31	8000	Rochester
	V35	8000	Syracuse
	V36 V29	8000	Wilkes-Barre
	V147	8000	Wilkes-Barre
Erie	V43	9000	Buffalo
	V14	9000	Buffalo
	V2	9000	Buffalo
	V90 DKK	9000	Buffalo
	V464 DKK	9000	Buffalo
	JHW V115	9000	Buffalo
	JHW V265 DKK	9000	Buffalo
	V522 V188 JFN (East-bound)	8000	Cleveland
	V522 (East-bound)	8000	Cleveland
	JFN V14 MENTO (West-bound)	8000	Cleveland
	V37 (Overflight traffic only)	8000	Pittsburgh
	V43	8000	Youngstown
Griffiss	UCA V490 GALWA	10,000	Albany
	UCA V2	10,000	Albany
	GGT V14	10,000	Albany
	UCA V428 V29	8000	Binghamton
	UCA V428	8000	Elmira
	UCA V496	10,000	Glens Falls
	UCA V2	10,000	Syracuse
	UCA V428 V153	10,000	Syracuse
	V14 V153	10,000	Syracuse
Harrisburg	HAR V162 ETX	7000	Allentown
	LRP V39 ETX	7000	Allentown
	HAR V469 OOD V184	5000	Atlantic City
	LRP LRP144 PADRE DQO OOD V184	5000	Atlantic City
	LRP V499	6000	Baltimore
	HAR V31	8000	Baltimore
	LRP V499	7000	Binghamton
	LRP V39 ROBRT AML	8000	Dulles
	HAR V162 V39 ROBRT AML	8000	Dulles
	LRP V39 V162 FJC V6 V232 COL (Props only)	7000	Kennedy
	HAR V162 FJC V6 V232 COL (Props only)	7000	Kennedy
	HAR V162 FJC V6 V232 TYKES V123 NANCI (Props only)	7000	LaGuardia
	LRP V39 V162 FJC V6 V232 TYKES V123 NANCI (Props only)	7000	LaGuardia
	HAR V162 FJC BWZ (Props only)	7000	Newark
	LRP V39 V162 FJC BWZ (Jets only)	7000	Newark
	LRP V210 BUNTS	5000	North Philadelphia
	HAR V210 BUNTS	5000	Philadelphia
	LRP LRP082 HUMEL (RDG ILS)	3000	Reading
	HAR V12 BOYER	5000	Reading
	HAR V162 FJC STW	7000	Teterboro
	LRP V39 V162 FJC STW	7000	Teterboro
	HAR V265 KRANT	8000	Washington
	LRP V93 BAL	8000	Washington
	HAR V162 FJC STW SAX V39 BREZY	7000	Westchester Co.
	LRP V39 V162 FJC STW SAX V39 BREZY	7000	Westchester Co.
	LRP V93	7000	Wilkes-Barre
	HAR RAV HZL	7000	Wilkes-Barre
	LRP LRP144 PADRE DQO	5000	Wilmington
	V469	5000	Wilmington
Huntington	V128	9000	Charleston
	V4	9000	Charleston
	DIRECT	9000	Charleston
Manchester	EEN V93 V292 V408 LHY	10000	Allentown
	(1) GDM ORW V16 JFK V229	10000	Atlantic City
	GDM ORW V308 BRIGS	10000	Atlantic City

Approach Control Area (Including Satellites)		Route	Highest Altitude	Destination
		**(1)** GDM ORW V16 ENO V268 SWANN	10000	Baltimore
		GDM ORW HTO V268 SWANN	10000	Baltimore
		EEN V93 V292 V408 LHY V93 BAL	10000	Baltimore
		**(1)** GDM ORW V16 JFK COL	10000	Belmar
		GDM ORW V308 MANTA V276 DIXIE	10000	Belmar
		TOMIE LWM	10000	Boston
		GDM V229 WITNY	10000	Bradley
		CLOWW WITNY (/E, /F, /G only)	10000	Bradley
		GDM V229 HFD	10000	Bridgeport
		CLOWW WITNY HFD (/E, /F, /G only)	10000	Bridgeport
		**(3)** GDM V229 HFD V1 MAD V475 BDR BDR288 RYMES	10000	Danbury
		**(3)** CLOWW WITNY HFD V1 MAD V475 BDR BDR288 RYMES (/E, /F, /G only)	10000	Danbury
		**(1)** GDM ORW V16 ENO	10000	Dover AFB
		GDM ORW V308 HTO V268 ENO	10000	Dover AFB
		EEN V93 CTR V270	10000	Elmira
		GDM ORW V16 DPK	10000	Farmingdale
		GDM V14 ORW GON	10000	Groton
		EEN V93 V292 V408 LHY V93 V162 HAR	10000	Harrisburg
		GDM V229 HFD	10000	Hartford
		CLOWW WITNY HFD (/E, /F, /G only)	10000	Hartford
		LWM BOS GAILS	10000	Hyannis
		GDM ORW V16 CCC	10000	Islip
		GDM ORW V16 DPK	10000	Kennedy
		**(3)** GDM V229 HFD V1 MAD V475	10000	LaGuardia
		EEN V93 V292 V408 LHY V93	10000	Lancaster
		BOS	10000	Marthas Vineyard
		BOS LFV	10000	Nantucket
		**(1)** GDM V229 SEALL V188 CMK V623 SAX	10000	Newark & SATS
		**(3)** GDM V3 CMK V623 SAX	10000	Newark & SATS
		**(1)** CLOWW WITNY HFD V229 V188 CMK V623 SAX (/E, /F, /G only)	10000	Newark & SATS
		**(3)** CLOWW WITNY HFD V3 CMK V623 SAX (/E, /F, /G only)	10000	Newark & SATS
		GDM V229 HFD	10000	New Haven
		CLOWW WITNY HFD (/E, /F, /G only)	10000	New Haven
		**(1)** GDM ORW V16 JFK V1	10000	Norfolk
		GDM ORW V308 HTO V139	10000	Norfolk
		**(1)** GDM ORW V16 DIXIE V276 ARD	10000	N.E. Philadelphia
		GDM ORW V308 MANTA V276 ARD	10000	N.E. Philadelphia
		**(1)** GDM ORW V16 VCN OOD	10000	Philadelphia
		GDM ORW V308 BRIGS ACY V184 OOD	10000	Philadelphia
		EEN V93 V292 V408 LHY V58 GRACE	10000	Pittsburgh
		EEN CTR	10000	Pittsfield
		GDM V151 PVD	10000	Providence
		BOS	10000	Provincetown
		**(1)** GDM ORW V16	10000	Richmond
		GDM ORW HTO V268 ENO V16	10000	Richmond
		GDM V39 STUBY V205 TRESA	10000	Stewart
		CAM V490 UCA	10000	Syracuse
		**(1)** GDM ORW V16 DIXIE V276 RBV	10000	Trenton
		GDM ORW V308 MANTA V276 RBV	10000	Trenton
		GDM V229 HFD V3 SORRY	10000	Waterbury-Oxford
		CLOWW WITNY HFD (/E, /F, /G only)	10000	Waterbury-Oxford
		GDM ORW V308 HTO	10000	Westhampton Beach
		**(3)** GDM V229 HFD V1 MAD V475 BDR BDR288 RYMES	10000	White Plains
		**(5)** EEN V93 PWL IGN V157 HAARP	10000	White Plains
		**(3)** CLOWW WITNY HFD V1 MAD V475 BDR BDR288 RYMES (/E, /F, /G only)	10000	White Plains
		**(1)** GDM ORW V16 JFK V229 PANZE V44 SIE	10000	Wildwood
		GDM ORW V308 SIE	10000	Wildwood
		EEN V93 V292 V408 LHY	10000	Wilkes-Barre
		GDM V229 SPENO	10000	Worcester
Manchester/Pease		EEN V93 V292 V408 LHY	10000	Allentown
		**(1)** MHT V106 GDM ORW V16 JFK V229	10000	Atlantic City
		MHT V106 GDM ORW V308 BRIGS	10000	Atlantic City

Approach Control Area (Including Satellites)	Route	Highest Altitude	Destination
.....	**(1)** MHT V106 GDM ORW V16 ENO V268 SWANN	10000	Baltimore
.....	MHT V106 GDM ORW HTO V268 SWANN	10000	Baltimore
.....	EEN V93 V292 V408 LHY V93 BAL	10000	Baltimore
.....	LWM	10000	Bedford
.....	**(1)** MHT V106 GDM ORW V16 JFK COL	10000	Belmar
.....	MHT V106 GDM ORW V308 MANTA V276 DIXIE	10000	Belmar
.....	STEVO LWM	10000	Boston
.....	MHT V106 GDM V229 WITNY	10000	Bradley
.....	CLOWW WITNY (/E, /F, /G only)	10000	Bradley
.....	MHT V106 GDM V229 HFD	10000	Bridgeport
.....	CLOWW WITNY HFD (/E, /F, /G only)	10000	Bridgeport
.....	**(3)** MHT V106 GDM V229 HFD V1 MAD V475 BDR BDR288 RYMES	10000	Danbury
.....	**(3)** CLOWW WITNY HFD V1 MAD V475 BDR BDR288 RYMES (/E, /F, /G only)	10000	Danbury
.....	**(1)** MHT V106 GDM ORW V16 ENO	10000	Dover AFB
.....	MHT V106 GDM ORW V308 HTO V268 ENO	10000	Dover AFB
.....	EEN V93 CTR V270	10000	Elmira
.....	MHT V106 GDM ORW V16 DPK	10000	Farmingdale
.....	MHT V106 GDM V14 ORW GON	10000	Groton
.....	EEN V93 V292 V408 LHY V93 V162 HAR	10000	Harrisburg
.....	MHT V106 GDM V229 HFD	10000	Hartford
.....	CLOWW WITNY HFD (/E, /F, /G only)	10000	Hartford
.....	EXALT V139 TONNI	10000	Hyannis
.....	MHT V106 GDM ORW V16 CCC	10000	Islip
.....	MHT V106 GDM ORW V16 DPK	10000	Kennedy
.....	**(3)** MHT V106 GDM V229 HFD V1 MAD V475	10000	LaGuardia
.....	EEN V93 V292 V408 LHY V93	10000	Lancaster
.....	EXALT V139 TONNI	10000	Marthas Vineyard
.....	EXALT V139 TONNI	10000	Nantucket
.....	**(1)** MHT V106 GDM V229 SEALL V188 CMK V623 SAX	10000	Newark & SATS
.....	**(3)** MHT V106 GDM V3 CMK V623 SAX	10000	Newark & SATS
.....	**(1)** CLOWW WITNY HFD V229 V188 CMK V623 SAX (/E, /F, /G only)	10000	Newark & SATS
.....	**(3)** CLOWW WITNY HFD V3 CMK V623 SAX (/E, /F, /G only)	10000	Newark & SATS
.....	MHT V106 GDM V229 HFD	10000	New Haven
.....	CLOWW WITNY HFD (/E, /F, /G only)	10000	New Haven
.....	**(1)** MHT V106 GDM ORW V16 JFK V1	10000	Norfolk
.....	MHT V106 GDM ORW V308 HTO V139	10000	Norfolk
.....	LWM	10000	Norwood
.....	**(1)** MHT V106 GDM ORW V16 DIXIE V276 ARD	10000	N.E. Philadelphia
.....	MHT V106 GDM ORW V308 MANTA V276 ARD	10000	N.E. Philadelphia
.....	**(1)** MHT V106 GDM ORW V16 VCN OOD	10000	Philadephia
.....	MHT V106 GDM ORW V308 BRIGS ACY V184 OOD	10000	Philadelphia
.....	EEN V93 V292 V408 LHY V58 GRACE	10000	Pittsburgh
.....	EEN CTR	10000	Pittsfield
.....	MHT V106 GDM V151 PVD	10000	Providence
.....	EXALT V139 TONNI	10000	Provincetown
.....	**(1)** MHT V106 GDM ORW V16	10000	Richmond
.....	MHT V106 GDM ORW HTO V268 ENO V16	10000	Richmond
.....	MHT V106 GDM V39 STUBY V205 TRESA	10000	Stewart
.....	MHT V490 UCA	10000	Syracuse
.....	**(1)** MHT V106 GDM ORW V16 DIXIE V276 RBV	10000	Trenton
.....	MHT V106 GDM ORW V308 MANTA V276 RBV	10000	Trenton
.....	MHT V106 GDM V229 HFD V3 SORRY	10000	Waterbury-Oxford
.....	CLOWW WITNY HFD (/E, /F, /G only)	10000	Waterbury-Oxford
.....	MHT V106 GDM ORW V308 HTO	10000	Westhampton Beach
.....	**(3)** MHT V106 GDM V229 HFD V1 MAD V475 BDR BDR288 RYMES	10000	White Plains
.....	**(5)** EEN V93 PWL IGN V157 HAARP	10000	White Plains
.....	**(3)** CLOWW WITNY HFD V1 MAD V475 BDR BDR288 RYMES (/E, /F, /G only)	10000	White Plains
.....	**(1)** MHT V106 GDM ORW V16 JFK V229 PANZE V44 SIE	10000	Wildwood
.....	MHT V106.GDM ORW V308 SIE	10000	Wildwood
.....	EEN V93 V292 V408 LHY	10000	Wilkes-Barre

Approach Control Area (Including Satellites)		Route	Highest Altitude	Destination
		MHT V106 GDM V229 SPENO	10000	Worcester
McGuire		V16 DIXIE V229	4000	Atlantic City
		COL COL192 DIXIE V229	4000	Atlantic City
		DIXIE V16 VCN (Overflights only)	6000	Atlantic City
		CYN V1 HOWIE (Overflights only)	6000	Atlantic City
		DIXIE V229 BDR BDR014 JUDDS (Preferred Single Engine Route)	7000	Bradley
		DIXIE V16 ENO	6000	Dover AFB
		DIXIE V229 (Single Engine only)	7000	Hartford
		DIXIE V229 HFD V167 PVD V151 GAILS (Single Engine Only)	7000	Hyannis
		RBV V276 DIXIE V16 JFK CCC (Single Engine only)	5000	Islip
		V184 ZIGGI JFK210 JFK CCC (No single engine; N/A btn 1400–2100 local)	5000	Islip
		GXU GXU055 RBV122 ZIGGI JFK210 JFK (No Single Engine)	5000	Kennedy
		RBV V276 DIXIE V16 JFK (Single Engine only)	5000	Kennedy
		RBV V276 ZIGGI JFK210 JFK (Twins only)	5000	Kennedy
		V184 ZIGGI JFK210 JFK (Twins only)	5000	Kennedy
		V229 JFK (Single Engine only)	5000	Kennedy
		RBV V123 NANCI (Props)	4000	LaGuardia
		RBV V123 NANCI (Jets only)	8000	LaGuardia
		DIXIE V229 BDR MAD V475 V188 GON V374 (Single Engine Only)	7000	Martha's Vineyard
		DIXIE V229 BDR MAD V475 V188 GON V58 NEWBE DEEPO (Single Engine Only)	7000	Nantucket
		V184 ZIGGI V276 RBV RBV005 OWBIE (Jets only)	6000	Newark
		DIXIE V276 RBV RBV005 OWBIE (Single engine only)	5000	Newark
		V229 DIXIE V276 RBV V249 METRO (Turbojet only)	4000	Newark (Sats)
		V184 ZIGGI V276 ARD	4000	N. Philadelphia
		V1 DIXIE V276 ARD	4000	N. Philadelphia
		RBV V276 ARD	4000	No. Philadelphia
		V1 CYN V312 OOD (Props only)	4000	Philadelphia
		V1 CYN V312 OOD (Jets only)	5000	Philadelphia
		DIXIE V229 JFK V229 BDR MAD V475 V188 GON (Single engine)	7000	Providence
		DIXIE V16 VCN ATR V1	6000	Salisbury
		V184 ZIGGI V276 RBV V249 SAX V39 BREZY	5000	Westchester Co.
New York/Bridgeport		SOARS V487 CANAN	10000	Albany
		HUO V162 FJC	5000	Allentown
		DPK V16 DIXIE V229 ACY (Single Engine only)	6000	Atlantic City
		MAD V1 HFD V229 GDM V39 CON	10000	Augusta
		MAD HFD CLOWW (/E, /F, /G only)	10000	Augusta
		DPK V16 ENO V268 SWANN (Single Engine only)	6000	Baltimore
		MAD V1 HFD V229 GDM V39 AUG	10000	Bangor
		MAD HFD CLOWW (/E, /F, /G only)	10000	Bangor
		MAD V1 HFD V229 GDM V106 ENE	10000	Bar Harbor
		MAD HFD CLOWW (/E, /F, /G only)	10000	Bar Harbor
		MAD V1 HFD HFD053 DREEM	10000	Bedford
		DPK JFK COL	6000	Belmar
		MAD V475 V188 GON	9000	Block Island
		MAD V1 HFD HFD053 DREEM	9000	Boston (North)
		**(3)** MAD V475 ORW V16 WOONS	10000	Boston
		BDR BDR014 JUDDS	10000	Bradley
		BDR	2000	Bridgeport SATS
		SOARS V487 CAM	10000	Burlington
		BDR JUDDS (/E, /F, /G only)	1000	Burlington
		HUO V162 HAR	5000	Capital City
		MAD V1 HFD V229 GDM V39 CON	10000	Concord
		MAD HFD CLOWW (/E, /F, /G only)	10000	Concord
		DPK V16 DIXIE V1 LEEAH V268 BAL BAL294 KROLL AML (Single Engine only)	6000	Dulles
		MAD MAD126 MONDI	7000	Groton

Approach Control Area (Including Satellites)		Route	Highest Altitude	Destination
		HTO	3000	Hampton
		MAD V1 HFD	5000	Hartford
		MAD V475 PVD V151 GAILS	10000	Hyannis
		CCC	4000	Islip
		MAD V1 HFD V229 GDM	10000	Keene
		BDR JUDDS WHATE (/E, /F, /G only)	10000	Keene
		DPK	4000	Kennedy
		R/V LGA075	4000	LaGuardia
		HUO V162 ETX V39 LRP	5000	Lancaster
		MAD V1 HFD V229 GDM V151	10000	Lebanon
		BDR JUDDS WHATE (/E, /F, /G only)	10000	Lebanon
		MAD V1 HFD V229 GDM V106 MHT	10000	Manchester
		MAD HFD CLOWW (/E, /F, /G only)	10000	Manchester
		DPK V16 DIXIE V16 CYN (Single Engine only)	6000	McGuire
		MAD V475 V188 GON V374 MVY	9000	Martha's Vineyard
		MAD	3000	Meriden Markham
		DPK V16 VCN (Single Engine only)	6000	Millville
		MAD V475 V188 GON V58 NEWBE DEEPO	10000	Nantucket
		MAD V475 V188 GON V374 MINNK	9000	New Bedford
		DIRECT	2000	New Haven
		CMK V188 SAX	4000	Newark
		DPK V16 DIXIE V1 (Single Engine only)	6000	Norfolk
		**(3)** MAD V475 ORW V16 WOONS	10000	Norwood
		DPK V16 DIXIE V276 ARD (SIngle Engine only)	6000	N. Philadelphia
		DIXIE V16 CYN V312 OOD (Single Engine only)	6000	Philadelphia
		MAD V1 HFD V229 GDM V106 ENE	10000	Portland
		MAD HFD CLOWW (/E, /F, /G only)	10000	Portland
		**(3)** MAD V1 HFD V229 GDM V106 RAYMY	10000	Portsmouth
		MAD HFD CLOWW (/E, /F, /G only)	10000	Portsmouth
		MAD V475 V188 GON	9000	Providence
		MAD V475 PVD V151 GAILS	10000	Provincetown
		MAD V475 V188 GON	9000	Quonset
		SAX V249 SBJ V30 ETX V39 FLOAT (Props only)	7000	Reading
		DPK V16 (Single Engine only)	6000	Richmond
		DPK V16 DIXIE V1 (Single Engine only)	6000	Salisbury
		HAAYS HUO V273 HNK	10000	Syracuse
		DPK V16 DIXIE V1 V308 OTT (Single Engine only)	6000	Washington
		BDR BDR 288 RYMES	4000	Westchester Co.
		DPK V16 DIXIE V229 PANZE V44 SIE (Single Engine only)	6000	Wildwood
		MAD V1 GRAYM	9000	Worcester
New York /Islip		SAX V249 SBJ V30 ETX (Non jet/Non turboprop)	8000	Allentown
		DPK V16 DIXIE V229 ACY (Single Engine only)	6000	Atlantic City
		DPK V16 DIXIE V1 V308 OTT (Single Engine only)	6000	Andrews AFB
		MAD HFD CLOWW (/E, /F, /G only)	10000	Augusta
		DPK V16 ENO V268 SWANN (Single Engine only)	6000	Baltimore
		MAD HFD CLOWW (/E, /F, /G only)	10000	Bangor
		MAD HFD CLOWW (/E, /F, /G only)	10000	Bar Harbor
		DPK JFK COL	6000	Belmar
		HTO V268 SEY	7000	Block Island
		HTO V308 ORW V16 WOONS	9000	Boston
		MAD V1 HFD HFD053 DREEM	9000	Boston (North)
		BDR BDR014 JUDDS	8000	Bradley
		BDR BDR014 JUDDS (Jets only)	10000	Bradley
		BDR	4000	Bridgeport
		BDR JUDDS (/E, /F, /G only)	10000	Burlington
		SAX V249 SBJ V30 ETX V162 HAR (Non jet/Non turboprop only)	8000	Capital City
		MAD HFD CLOWW (/E, /F, /G only)	10000	Concord
		DPK V16 DIXIE V1 LEEAH V268 BAL BAL294 KROLL AML (Single Engine only)	6000	Dulles
		HTO HTO034 MONDI	7000	Groton
		HTO	3000	Hampton
		MAD V1 HFD	5000	Hartford

Approach Control Area (Including Satellites)		Route	Highest Altitude	Destination
		HTO V139 PVD V151 GAILS	9000	Hyannis
		CCC	2000	Islip (SATS)
		BDR JUDDS WHATE (/E, /F, /G only)	10000	Keene
		DPK	3000	Kennedy
		R/V LGA075	5000	LaGuardia
		HTO HT0302 NESSI LGA075	6000	LaGuardia
		SAX V249 SBJ LANNA V30 ETX V39 LRP (Props only)	8000	Lancaster
		BDR JUDDS WHATE (/E, /F, /G only)	10000	Lebanon
		DPK V16 CYN (Single Engine only)	6000	McGuire
		MAD HFD CLOWW (/E, /F, /G only)	10000	Manchester
		HTO V139 WACKY V374 MVY (Single Engine)	9000	Martha's Vineyard
		HTO V46 CLAMY (Twin Engine)	9000	Martha's Vineyard
		MAD	5000	Meriden
		DPK V16 VCN (Single Engine only)	6000	Millville
		HTO V46 CLAMY (Twin Engine)	9000	Nantucket
		HTO SEY V58 NEWBE DEEPO (Single Engine)	9000	Nantucket
		HTO V139 WACKY	9000	New Bedford
		HVN	4000	New Haven
		CMK V188 SAX	4000	Newark
		DPK V16 DIXIE V1 (Single Engine only)	6000	Norfolk
		DPK V16 DIXIE V276 ARD (Single Engine only)	6000	N. Philadelphia
		DPK V16 CYN V312 OOD (Single Engine only)	6000	Philadelphia
		MAD HFD CLOWW (/E, /F, /G only)	10000	Portland
		MAD HFD CLOWW (/E, /F, /G only)	10000	Portsmouth
		HTO V139 WACKY	9000	Providence
		HTO V139 WACKY	9000	Quonset
		SAX V249 SBJ V30 ETX V39 FLOAT (Non jet/Non turboprop only)	8000	Reading
		DPK V16 (Single Engine only)	6000	Richmond
		DPK V16 DIXIE V1 (Single Engine only)	6000	Salisbury
		DPK V16 DIXIE V1 V308 OTT (Single Engine only)	6000	Washington
		BDR BDR 288 RYMES	5000	Westchester Co.
		HTO BDR BDR 288 RYMES	6000	Westchester Co.
		HTO V308 GON	9000	Westerly
		DPK V16 DIXIE V229 PANZE V44 SIE (Single Engine only)	6000	Wildwood
		MAD V1 GRAYM	9000	Worcester
New York /Kennedy		SAX V249 SBJ V30 ETX (Non jet/Non turboprop)	8000	Allentown
		DIXIE V229 ACY (Props only)	6000	Atlantic City
		DIXIE V1 HOWIE (Jets only)	8000	Atlantic City
		DIXIE V1 V308 OTT (Props only)	6000	Andrews AFB
		BDR HFD CLOWW (/E, /F, /G only)	10000	Augusta
		DIXIE V16 ENO V268 SWANN (Props only)	6000	Baltimore
		BDR HFD CLOWW (/E, /F, /G only)	10000	Bangor
		BDR HFD CLOWW (/E, /F, /G only)	10000	Bar Harbor
		COL	2000	Belmar
		BDR MAD V475 V188 GON	9000	Block Island
		BDR V229 HFD V3 WOONS	9000	Boston
		BDR V229 HFD HFD053 DREEM	9000	Boston (North)
		BDR HFD FOSTY WOONS (/E, /F, /G only)	10000	Boston
		BDR BDR014 JUDDS	8000	Bradley
		BDR (Jets only)	10000	Bradley
		BDR	3000	Bridgeport
		BDR JUDDS (/E, /F, /G only)	10000	Burlington
		SAX V249 SBJ V30 ETX V162 HAR (Non jet/Non turboprop)	8000	Capital City
		BDR HFD CLOWW (/E, /F, /G only)	10000	Concord
		DIXIE V1 LEEAH V268 BAL BAL294 KROLL AML (Non-pressurized aircraft only)	6000	Dulles
		BDR MAD MAD126 MONDI	9000	Groton
		R/V CCC 232 CCC HTO	3000	Hampton
		BDR V229 HFD	9000	Hartford
		BDR V229 HFD V167 PVD V151 GAILS	9000	Hyannis
		R/V ILS 6 LOC (Text Info)	3000	Islip
		R/V CCC232 CCC	3000	Islip
		BDR JUDDS WHATE (/E, /F, /G only)	10000	Keene

Approach Control Area (Including Satellites)		Route	Highest Altitude	Destination
		Direct	2000	LaGuardia
		SAX V249 SBJ V30 ETX V162 V93 LRP (Props only)	8000	Lancaster
		BDR JUDDS WHATE (/E, /F, /G only)	10000	Lebanon
		DIXIE V16 CYN	6000	McGuire
		BDR HFD CLOWW (/E, /F, /G only)	10000	Manchester
		BDR MAD V475 V188 GON V374 MVY	9000	Martha's Vineyard
		BDR MAD	3000	Meriden Markham
		DIXIE V16 VCN (Props only)	6000	Millville
		BDR MAD V475 V188 GON V58 NEWBE DEEPO	10000	Nantucket
		COL V232 SBJ	3000	Newark
		BDR MAD V475 V188 GON V374 MINNK	9000	New Bedford
		DIXIE V1 (Props only)	6000	Norfolk
		DIXIE V276 ARD	4000	N. Philadelphia
		DIXIE V16 CYN V312 OOD (Props only)	6000	Philadelphia
		DIXIE V16 CYN V312 OOD (Jets only)	8000	Philadelphia
		BDR HFD CLOWW (/E, /F, /G only)	10000	Portland
		BDR HFD CLOWW (/E, /F, /G only)	10000	Portsmouth
		BDR MAD V475 V188 GON (210 kts +)	9000	Providence
		BDR MAD V475 V188 GON	9000	Quonset
		SAX V249 SBJ V30 ETX V39 FLOAT (Non jet/Non turboprop only)	8000	Reading
		DIXIE V16 (Props only)	6000	Richmond
		DIXIE V1 (Props only)	6000	Salisbury
		DIXIE V1 V308 OTT (Props only)	6000	Washington
		DPK V483 CMK	2000	Westchester Co
		BDR MAD V475 V188 GON	9000	Westerly
		DIXIE V229 PANZE V44 SIE (Props only)	6000	Wildwood
		DIXIE V1 HOWIE (Jets only)	8000	Wildwood
		BDR MAD V1 GRAYM	9000	Worcester
New York/ LaGuardia		SAX V249 SBJ V30 ETX	8000	Allentown
		DIXIE V229 ACY (Props only)	6000	Atlantic City
		DIXIE V1 HOWIE (Jets only)	8000	Atlantic City
		SAX V249 SBJ LANNA V30 ETX V39 LRP V93 BAL (Props only)	8000	Andrews AFB
		BDR HFD CLOWW (/E, /F, /G only)	10000	Augusta
		BDR HFD CLOWW (/E, /F, /G only)	10000	Bangor
		SAX V249 SBJ LANNA V30 ETX V39 LRP V499 BAL (Props only)	8000	Baltimore
		BDR HFD CLOWW (/E, /F, /G only)	10000	Bar Harbor
		JFK COL	6000	Belmar
		BDR MAD V475 V188 GON	9000	Block Island
		BDR V229 HFD V3 WOONS	9000	Boston
		BDR V229 HFD HFD053 DREEM	9000	Boston (North)
		BDR HFD FOSTY WOONS (/E, /F, /G only)	10000	Boston
		BDR BDR014 JUDDS	8000	Bradley
		BDR (Jets only)	10000	Bradley
		BDR 248 CCC285 PUGGS V229 BDR	5000	Bridgeport
		R/V BDR248 BDR. . .(Helicopter Route)	5000	Bridgeport (Points NE)
		BDR JUDDS (/E, /F, /G only)	10000	Burlington
		SAX V249 SBJ V30 ETX V162 HAR	8000	Capital City
		BDR HFD CLOWW (/E, /F, /G only)	10000	Concord
		SAX V249 SBJ LANNA V30 ETX V39 ROBRT AML (Props only)	8000	Dulles
		BDR MAD MAD126 MONDI	9000	Groton
		BDR 248 BDR HTO	5000	Hampton
		BDR V229 HFD	9000	Hartford
		BDR V229 HFD V167 PVD V151 GAILS	9000	Hyannis
		BDR 248 CCC285 CCC	5000	Islip
		BDR JUDDS WHATE (/E, /F, /G only)	10000	Keene
		DPK	5000	Kennedy
		SBJ SAX V249 V30 ETX V162 V93 LRP (Props only)	7000	Lancaster
		BDR JUDDS WHATE (/E, /F, /G only)	10000	Lebanon
		DIXIE V16 CYN	6000	McGuire
		BDR MAD V475 V188 GON V374 MVY	9000	Martha's Vineyard
		BDR HFD CLOWW (/E, /F, /G only)	10000	Manchester
		BDR MAD	5000	Meriden Markham
		DIXIE V16 VCN (Props only)	6000	Millville
		BDR MAD V475 V188 GON V58 NEWBE DEEPO	10000	Nantucket

Approach Control Area (Including Satellites)		Route	Highest Altitude	Destination
		SBJ	3000	Newark
		BDR MAD V475 V188 GON V374 MINNK	9000	New Bedford
		DIXIE V1 (Props only)	6000	Norfolk
		BDR HFD CLOWW (/E, /F, /G only)	10000	Portland
		BDR HFD CLOWW(/E, /F, /G only)	10000	Portsmouth
		BDR MAD V475 V188 GON	9000	Providence
		BDR MAD V475 V188 GON	9000	Quonset
		SBJ SAX V249 V30 ETX V39 FLOAT	7000	Reading
		DIXIE V16 (Props only)	6000	Richmond
		DIXIE V1 (Props only)	6000	Salisbury
		SAX V249 SBJ LANNA V30 ETX V39 LRP V499 BAL(Props only)	8000	Washington
		CMK	3000	Westchester Co.
		DIXIE V229 PANZE V44 SIE (Props only)	6000	Wildwood
		DIXIE V1 HOWIE (Jets only)	8000	Wildwood
		BDR MAD V1 GRAYM	9000	Worcester
New York/Newark		LANNA V30 ETX (Jets only)	8000	Allentown
		LANNA V30 ETX (Props only)	6000	Allentown
		DIXIE V229 ACY (Props only)	6000	Atlantic City
		DIXIE V1 HOWIE (Jets only)	8000	Atlantic City
		BREZY V39 CMK V3 HFD CLOWW (/E, /F, /G only)	10000	Augusta
		LANNA V30 ETX V39 LRP V499 BAL (Props only)	6000	Baltimore
		(Props 210 kts +)	8000	
		BREZY V39 CMK V3 HFD CLOWW (/E, /F, /G only)	10000	Bangor
		BREZY V39 CMK V3 HFD CLOWW (/E, /F, /G only)	10000	Bar Harbor
		COL	2000	Belmar
		BDR MAD V475 V188 GON (210 kts +)	9000	Block Island
		BREZY V39 CMK V3 HFD GON (- 210 kts)	9000	Block Island
		BDR V229 HFD HFD053 DREEM (210 kts +)	9000	Boston (North)
		BREZY V39 CMK V3 HFD HFD053 DREEM (-210 kts)	9000	Boston (North)
		BDR V229 HFD V3 WOONS (210 kts +)	9000	Boston
		BREZY V39 CMK V3 WOONS (-210 kts)	9000	Boston
		BREZY V39 CMK V3 HFD FOSTY WOONS (/E, /F, /G only)	10000	Boston
		BDR (Jets only)	10000	Bradley
		BREZY V39 CMK V419 BRISS (Props only)	9000	Bradley
		BDR248 CCC285 V229 (All Jets)	5000	Bridgeport
		BREZY V39 CMK V374 DENNA (All Props)	6000	Bridgeport
		BREZY V39 CMK SOARS JUDDS (/E, /F, /G only)	10000	Burlington
		LANNA V30 ETX V162 HAR (Props only)	6000	Capital City
		BREZY V39 CMK V3 HFD CLOWW (/E, /F, /G only)	10000	Concord
		BREZY V39 CMK	3000	Danbury
		LANNA V30 ETX V39 ROBRT AML (Props only)	6000	Dulles
		(Props 210 kts +)	8000	
		SAX V213 HELON	4000	Dutchess Co
		DIXIE V1 (Props 210 kts +)	6000	Grand Strand
		BDR MAD MAD126 MONDI (+ 210 kts)	9000	Groton
		BREZY V39 CMK V3 HFD GON (-210 kts)	9000	Groton
		BDR 248 BDR HTO (All Jets)	5000	Hampton
		BREZY V39 CMK V374 BETHA HTO (All Props)	6000	Hampton
		LANNA V30 ETX V162 HAR (Props only)	6000	Harrisburg Intl
		(Props 210 kts +)	8000	
		BDR V229 HFD (210 kts +)	9000	Hartford
		LANNA V30 ETX (Props only)	6000	Hazleton Muni
		(Props 210 kts +)	8000	
		BREZY V39 CMK V3 HFD (-210 kts)	9000	Hartford
		BDR V229 HFD V167 PVD V151 GAILS (210 kts +)	9000	Hyannis
		BREZY V39 CMK V3 HFD V167 PVD V151 GAILS (- 210 kts)	9000	Hyannis
		BDR 248 CCC285 CCC (All Jets)	5000	Islip
		BREZY V39 CMK V374 DENNA BDR CCC (All Props)	6000	Islip

Approach Control Area (Including Satellites)		Route	Highest Altitude	Destination
		BREZY V39 CMK SOARS JUDDS WHATE (/E, /F, /G only)	10000	Keene
		R/V DPK282 (EWR Dep 4 & EWRN)	5000	Kennedy
		COL JFK (EWR Dep 22 & EWRS)	4000	Kennedy
		LANNA V30 ETX V39 LRP (Props only)	6000	Lancaster
		(Props 210 kts +)	8000	
		BREZY V39 CMK SOARS JUDDS WHATE (/E, /F, /G only)	10000	Lebanon
		**(4)(5)** LANNA V30 ETX	8000	Lehigh Valley Intl
		DIXIE V16 (Props only)	6000	Lynchburg Rgnl/Preston Glenn Fld
		BREZY V39 CMK V3 HFD CLOWW (/E, /F, /G only)	10000	Manchester
		BDR MAD V475 V188 GON V374 MVY (210 kts +)	9000	Martha's Vineyard
		BREZY V39 CMK V3 HFD GON V374 MVY (-210 kts)	9000	Martha's Vineyard
		DIXIE V16 CYN	6000	McGuire
		BDR MAD	5000	Meriden
		**(2)** BREZY V39 CMK V3 YALER	5000	Meriden
		DIXIE V16 VCN (Props only)	6000	Millville
		BREZY V39 CMK V374 BETHA HTO	6000	Montauk
		BREZY V39 CMK V3 HFD V58 NEWBE DEEPO	10000	Nantucket
		BDR MAD V475 V188 GON V374 MINNK (210 kts +)	9000	New Bedford
		BREZY V39 CMK V3 HFD V167 PVD (-210 kts)	9000	New Bedford
		**(4)** BIGGY V3 MAZIE	8000	New Castle Co
		(Props only)	4000	
		DIXIE V1 (Props only)	6000	Norfolk
		BIGGY V3 MAZIE	4000	Northeast Philadelphia
		SAX V213 HELON	4000	Orange Co
		**(4)** BIGGY V3 MAZIE	8000	Philadelphia Intl
		(Props only)	4000	
		BREZY V39 CMK V3 HFD CLOWW (/E, /F, /G only)	10000	Portland
		BREZY V39 CMK V3 HFD CLOWW (/E, /F, /G only)	10000	Portsmouth
		SBJ BIGGY B3 MAZIE	4000	Pottstown Limerick
		BDR MAD V475 V188 GON (210 kts+)	9000	Providence
		BREZY V39 CMK V3 HFD V167 PVD (-210 kts)	9000	Providence
		BDR MAD V475 V188 GON (210 kts +)	9000	Quonset
		BREZY V39 CMK V3 HFD V167 PVD (- 210 kts)	9000	Quonset
		DIXIE V16 RIC V157 LVL V155 (Props only)	6000	Raleigh–Durham Intl
		**(4)** SBJ LANNA V30 ETX	8000	Reading Rgnl/Carl A Spaatz Fld
		(Props only)	4000	
		DIXIE V16 (Props only)	6000	Richmond
		LANNA V30 ETX V39 LRP V93 BAL (Props only)	6000	Ronald Reagan Washington Natl
		(Props 210 kts +)	8000	
		DIXIE V1 (Props only)	6000	Salisbury
		SAX SAX022 MANEE	4000	Stewart Intl
		SAX V213 HELON	4000	Sullivan Co Intl
		BREZY V39 CMK V374 BETHA HTO	6000	The Francis S Gabreski Arpt
		BIGGY V3 MAZIE	4000	Trenton Mercer
		BREZY V39 CMK V374 DENNA	6000	Waterbury–Oxford
		BREZY	3000	Westchester Co.
		DIXIE V229 PANZE V44 SIE (Props only)	6000	Wildwood
		Dixie V1 Howie (Jets only)	8000	Wildwood
		BDR MAD V1 GRAYM (210 kts +)	9000	Worcester
		BREZY V39 CMK V3 HFD V1 GRAYM (-210 kts)	9000	Worcester
New York/Stewart		STUBY V487 CANAN	10000	Albany
		STUBY V93 CON	10000	Augusta
		STUBY V93 CON V39 AUG	10000	Bangor
		STUBY V93 ENE	10000	Bar Harbor

Approach Control Area (Including Satellites)		Route	Highest Altitude	Destination
		STUBY CEF CEF088 DREEM	10000	Bedford
		PWL HFD V3 WOONS	10000	Boston
		PWL PWL111 BRISS or PWL V106 BAF (BAF/CEF)	10000	Bradley
		STUBY V487 CAM	10000	Burlington
		STUBY V93 CON	10000	Concord
		PWL HFD GON	10000	Groton
		PWL PWL111 BRISS	10000	Hartford
		PWL HFD V167 PVD V151 GAILS	10000	Hyannis
		STUBY	10000	Keene
		STUBY	10000	Lebanon
		STUBY V93 EEN	10000	Manchester
		PWL HFD V374 MVY	10000	Marthas Vineyard
		PWL HFD V58 NEWBE DEEPO	10000	Nantucket
		PWL HFD V3 WOONS	10000	Norwood
		STUBY V93 EEN	10000	Portland
		PWL V106 RAYMY	10000	Portsmouth
		PWL HFD V167 PVD	10000	Providence
		PWL HFD V167 PVD V151 GAILS	10000	Provincetown
		WEARD DNY	10000	Syracuse
		PWL V106 BAF	10000	Worcester
New York/ Westchester		CMK V39 SOARS V487 CANAN	10000	Albany
		HUO V162 FJC	5000	Allentown
		DIXIE V229 ACY (Props only)	6000	Atlantic City
		DIXIE V1 HOWIE (Jets Onlly)	8000	Atlantic City
		CMK V3 HFD V229 GDM V39 CON	10000	Augusta
		CMK V3 HFD CLOWW (/E, /F, /G only)	10000	Augusta
		SAX V249 SBJ LANNA V30 ETX V39 LRP V499 BAL (Props only)	8000	Baltimore
		CMK V3 HFD V229 GDM V39 AUG	10000	Bangor
		CMK V3 HFD CLOWW (/E, /F, /G only)	10000	Bangor
		CMK V3 HFD CLOWW (/E, /F, /G only)	10000	Bar Harbor
		CMK V3 HFD V229 GDM V106 ENE	10000	Bar Harbor
		JFK COL	6000	Belmar
		CMK V3 HFD HFD053 DREEM	10000	Boston & NO SATS
		**(3)** CMK V3 WOONS	10000	Boston
		CMK V3 HFD FOSTY WOONS (/E, /F, /G only)	10000	Boston
		CMK V419 BRISS	10000	Bradley
		CMK V374 DENNA	5000	Bridgeport
		CMK V39 SOARS V487 BTV	10000	Burlington
		CMK SOARS JUDDS (/E, /F, /G only)	10000	Burlington
		HUO V162 HAR	5000	Capital City
		CMK V3 HFD V229 GDM V39 CON	10000	Concord
		CMK V3 HFD CLOWW (/E, /F, /G only)	10000	Concord
		SAX V249 SBJ LANNA V30 ETX V39 ROBRT AML (Props only)	8000	Dulles
		CMK V3 HFD GON	10000	Groton
		CMK V374 BETHA HTO	5000	Hampton
		CMK V3 HFD	10000	Hartford
		CMK V3 HFD V167 PVD V151 GAILS	10000	Hyannis
		CMK V374 DENNA BDR CCC	5000	Islip
		CMK V3 HFD V229 GDM	10000	Keene
		CMK SOARS JUDDS WHATE (/E, /F, /G only)	10000	Keene
		CMK V483 DPK	3000	Kennedy
		DIRECT	3000	LaGuardia
		HUO V162 ETX V39 LRP	5000	Lancaster
		CMK V3 HFD V229 GDM V151	10000	Lebanon
		CMK SOARS JUDDS WHATE (/E, /F, /G only)	10000	Lebanon
		CMK V3 HFD V229 GDM V106 MHT	10000	Manchester
		CMK V3 HFD CLOWW (/E, /F, /G only)	10000	Manchester
		CMK V3 HFD GON V374 MVY	10000	Martha's Vineyard
		DIXIE V16 CYN	6000	McGuire
		Dixie V16 VCN (Props only)	6000	Millville
		CMK V3 HFD V58 NEWBE DEEPO	10000	Nantucket
		CMK V374 DENNA	5000	New Haven
		NYACK V188 SAX (Props)	4000	Newark
		NYACK V188 SAX (Jets)	5000	Newark
		DIXIE V1 (Props only)	6000	Norfolk
		CMK V3 WOONS	10000	Norwood & N SATS
		CMK V3 HFD V229 GDM V106 ENE	10000	Portland

Approach Control Area (Including Satellites)		Route	Highest Altitude	Destination
		CMK V3 HFD CLOWW (/E, /F, /G only)	10000	Portland
		CMK V3 HFD V229 GDM V106 RAYMY	10000	Portsmouth
		CMK V3 HFD CLOWW (/E, /F, /G only)	10000	Portsmouth
		CMK V3 HFD V167 PVD	10000	Providence
		CMK V3 HFD V167 PVD V151 GAILS	10000	Provincetown
		SAX V249 SBJ V30 ETX V39 FLOAT (Props only)	7000	Reading
		DIXIE V16 (Props only)	6000	Richmond
		SAX V249 SBJ LANNA V30 ETX V39 LRP V93 BAL (Props only)	8000	Ronald Reagan Washington Natl
		DIXIE V1 (Props only)	6000	Salisbury
		HAAYS HUO V273 SYR	10000	Syracuse
		DIXIE V229 PANZE V44 SIE (Props only)	6000	Wildwood
		DIXIE V1 HOWIE (Jets only)	8000	Wildwood
		CMK V3 HFD V1 GRAYM	10000	Worcester
Norfolk		HCM V33 COLIN V16 PXT	9000	Patuxent River
		HPW V260 RIC (West-bound only)	9000	Richmond
		CCV V1 SBY	5000	Salisbury
		CCV V139 SWL (Northeast-bound only)	5000	Snow Hill
		HCM HCM330 SVILL	7000	Washington
Patuxent		SWL V139	5000	Atlantic City
		PXT V16 V44	5000	Atlantic City
		SBY V1 V44	5000	Atlantic City
		SBY332 BAL133	4000	Baltimore
		PXT V93	5000	Baltimore
		SBY V29 ENO	5000	Dover AFB
		PXT V16 ENO	5000	Dover AFB
		PXT V16	5000	Dover AFB
		SBY VI ATR	5000	Dover AFB
		PXT V213 V286 FLUKY	6000	Dulles
		COLIN V33 HCM	6000	Newport News
		SBY V1 CCV	6000	Norfolk
		SWL V139 CCV	6000	Norfolk
		WHINO V33 V286 STEIN	5000	Norfolk
		PXT V213 ENO V29 DQO	5000	Philadelphia
		SBY V29 DQO	5000	Philadelphia
		PXT V16	6000	Richmond
		SBY V1 JAMIE HCM	6000	Richmond
		COLIN V33 HCM	6000	Richmond
		PXT V31 OTT (No Overflight of D.C. Area)	4000	Washington
		SBY CHURK OTT (No Overflight of D.C. Area)	4000	Washington
Philadelphia		RV FJC185 FJC	4000	Allentown
		OOD VCN V184 ACY	3000	Atlantic City
		MXE V378 BAL	6000	Baltimore
		DQO V166 V378 BAL	6000	Baltimore
		OOD V157 ENO	4000	Dover AFB
		DQO V29 ENO	4000	Dover AFB
		MXE V408 ROBRT AML	8000	Dulles
		MXE V184 MXE283027 V469 HAR	6000	Harrisburg
		PNE PNE090 ARD126 V16 DIXIE (Direct) (Single Engine only)	5000	Kennedy
		PNE PNE090 ARD126 V16 V276 ZIGGI (Direct) (No Single Engine)	5000	Kennedy
		RBV V123 PROUD (Jets only)	8000	LaGuardia
		MXE MXE295 HABER LRP137 LRP	4000	Lancaster
		ARD V214 METRO (Non Turbojets only)	5000	Newark
		RBV RBV005 OWBIE (Turbojet only)	7000	Newark
		MXE MXE334 HUMEL	4000	Reading
		REGLE V3 SBJ	4000	Teterboro
		MXE V408 VINNY V93 BAL	8000	Washington
		DQO V166 V93 BAL	8000	Washington
		RV FJC185 FJC BWZ SAX V39 BREZY	5000	Westchester Co.
		RV FJC185 FJC V149 RITTY	5000	Wilkes Barre/Scranton
Pittsburgh		BSV (Westbound only)	8000	Akron-Canton
		V37 (Southbound only)	8000	Clarksburg
		EWC V37 (Northbound only)	8000	Erie

Approach Control Area (Including Satellites)		Route	Highest Altitude	Destination
		EWC (Northbound only)	6000	Franklin
		EWC TDT (Northbound only)	6000	Jamestown
		DIRECT (Southbound only)	8000	Morgantown
		EWC (Northbound only)	8000	Youngstown
Portland		CON CAM	10000	Albany
		DIRECT	10000	Bangor
		DIRECT	10000	Bar Harbor
		ENE LWM	10000	Bedford & NO SATS
		**(3)** ENE PSM PSM221 STEVO LWM	10000	Boston
		**(5)** ENE V167 SCUPP	10000	Boston
		ENE V106 GDM V229 WITNY	10000	Bradley
		CLOWW WITNY (/E, /F, /G only)	10000	Bradley
		ENE V106 GDM V229 HFD	10000	Bridgeport
		CLOWW WITNY HFD (/E, /F, /G only)	10000	Bridgeport
		**(3)** ENE V106 GDM V229 HFD V1 MAD V475 BDR BDR288 RYMES	10000	Danbury
		**(3)** CLOWW WITNY HFD V1 MAD V475 BDR BDR288 RYMES (/E, /F, /G only)	10000	Danbury
		ENE V106 GDM V14 ORW V16 DPK	10000	Farmingdale
		ENE V106 GDM V14 ORW GON	10000	Groton
		ENE V106 GDM V229 HFD	10000	Hartford
		CLOWW WITNY HFD (/E, /F, /G only)	10000	Hartford
		ENE V139 TONNI	10000	Hyannis
		ENE V106 GDM V14 ORW V16 CCC	10000	Islip
		ENE V106 GDM V14 ORW V16 DPK	10000	Kennedy
		ENE V139 TONNI	10000	Marthas Vineyard
		ENE V139 TONNI	10000	Nantucket
		**(1)** ENE V106 GDM V229 SEALL V188 CMK V623 SAX	10000	Newark & SATS
		**(3)** ENE V106 GDM V3 CMK V623 SAX	10000	Newark & SATS
		**(1)** CLOWW WITNY HFD V229 V188 CMK V623 SAX (/E, /F, /G only)	10000	Newark & SATS
		**(3)** CLOWW WITNY HFD V3 CMK V623 SAX (/E, /F, /G only)	10000	Newark & SATS
		CLOWW WITNY HFD (/E, /F, /G only)	10000	New Haven
		**(1)** ENE V106 GDM V14 ORW V16 V276 ARD	10000	N.E. Philadelphia
		ENE V106 GDM V14 ORW V308 MANTA V276 ARD	10000	N.E. Philadelphia
		ENE LWM	10000	Norwood
		ENE V139 BURDY	10000	Providence
		ENE V139 TONNI	10000	Provincetown
		ENE V93 STUBY V205 TRESA	10000	Stewart
		CLOWW WITNY HFD (/E, /F, /G only)	10000	Waterbury-Oxford
		**(3)** CLOWW WITNY HFD V1 MAD V475 BDR BDR288 RYMES (/E, /F, /G only)	10000	White Plains
		ENE V106 GDM V229 SPENO	10000	Worcester
Portland/Augusta		CON CAM	10000	Albany
		DIRECT	10000	Bangor
		DIRECT	10000	Bar Harbor
		ENE LWM	10000	Bedford & NO SATS
		**(3)** ENE PSM PSM 221 STEVO LWM	10000	Boston
		**(5)** ENE V167 SCUPP	10000	Boston
		LABEL V39 GDM V229 WITNY	10000	Bradley
		CLOWW WITNY (/E, /F, /G only)	10000	Bradley
		LABEL V39 GDM V229 HFD	10000	Bridgeport
		CLOWW WITNY HFD (/E, /F, /G only)	10000	Bridgeport
		LABEL V39 CON	10000	Concord
		**(3)** LABEL V39 GDM V229 HFD V1 MAD V475 BDR BDR288 RYMES	10000	Danbury
		**(3)** CLOWW WITNY HFD V1 MAD V475 BDR BDR288 RYMES (/E, /F, /G only)	10000	Danbury
		LABEL V39 GDM V14 ORW V16 DPK	10000	Farmingdale
		LABEL V39 GDM V14 ORW GON	10000	Groton
		LABEL V39 GDM V229 HFD	10000	Hartford
		CLOWW WITNY HFD (/E, /F, /G only)	10000	Hartford
		ENE V139 TONNI	10000	Hyannis
		LABEL V39 GDM V14 ORW V16 CCC	10000	Islip
		LABLE V39 GDM V14 ORW V16 DPK	10000	Kennedy

Approach Control Area (Including Satellites)		Route	Highest Altitude	Destination
		ENE MHT	10000	Manchester
		ENE V139 TONNI	10000	Marthas Vineyard
		ENE V139 TONNI	10000	Nantucket
		**(1)** LABEL V39 GDM V229 SEALL V188 CMK V623 SAX	10000	Newark & SATS
		**(3)** LABEL V39 GDM V3 CMK V623 SAX	10000	Newark & SATS
		**(1)** CLOWW WITNY HFD V229 V188 CMK V623 SAX (/E, /F, /G only)	10000	Newark & SATS
		**(3)** CLOWW WITNY HFD V3 CMK V623 SAX (/E, /F, /G only)	10000	Newark & SATS
		CLOWW WITNY HFD (/E, /F, /G only)	10000	New Haven
		**(1)** LABEL V39 GDM V14 ORW V16 V276 ARD	10000	N.E. Philadelphia
		LABEL V39 GDM V14 ORW V308 MANTA V276 ARD	10000	N.E. Philadelphia
		ENE LWM	10000	Norwood
		ENE	10000	Portsmouth
		ENE V139 BURDY	10000	Providence
		ENE V139 TONNI	10000	Provincetown
		LABEL V39 STUBY V205 TRESA	10000	Stewart
		CLOWW WITNY HFD (/E, /F, /G only)	10000	Waterbury-Oxford
		**(3)** CLOWW WITNY HFD V1 MAD V475 BDR BDR288 RYMES (/E, /F, /G only)	10000	White Plain
		LABEL V39 GDM V229 SPENO	10000	Worcester
Providence		PUT ALB	10000	Albany
		HFD PWL V106 WEETS HUO V162	5000	Allentown/Harrisburg
		**(1)** ORW V16 JFK V229	10000	Atlantic City
		WOONS BOS PSM ENE	10000	Augusta
		**(1)** ORW V16 ENO V268 SWANN	10000	Baltimore
		WOONS BOS PSM ENE BGR	10000	Bangor
		WOONS BOS PSM ENE	10000	Bar Harbor
		WOONS	10000	Bedford & NO SATS
		**(3)** WOONS	10000	Boston
		**(5)** PVD V151 INNDY	10000	Boston
		PVD V405 BDL	10000	Bradley
		HFD	10000	Bridgeport
		PUB ALB V14	10000	Buffalo
		PUT V151 GDM V229	10000	Burlington
		WOONS MHT CON	10000	Concord
		**(3)** HFD V1 MAD V475 BDR BDR288 RYMES	10000	Danbury
		**(5)** PUT BAF IGN V157 HAARP	10000	Danbury
		**(1)** ORW V16 ENO	10000	Dover AFB
		PUT CTR V270	10000	Elmira
		PUT CTR V270	10000	Erie
		SEY HTO V46 DPK	10000	Farmingdale
		HFD	10000	Hartford
		PVD V151 GAILS	10000	Hyannis
		SEY HTO V46 CCC	10000	Islip
		PUT V151 GDM	10000	Keene
		SEY HTO V46 DPK	10000	Kennedy
		PVD V167 HFD V1 MAD V475	10000	LaGuardia
		PUT V151	10000	Lebanon
		WOONS	10000	Manchester
		PVD V167 TUTOR	10000	Marthas Vineyard
		**(1)** ORW V16 CYN	10000	McGuire AFB
		PVD PVD143 CLAMY	10000	Nantucket
		**(1)** PVD V167 HFD V229 SEALL V188 CMK V623 SAX	10000	Newark & SATS
		**(3)** PVD V167 HFD V3 CMK V623 SAX	10000	Newark & SATS
		HFD	10000	New Haven
		**(1)** ORW V16 DIXIE V276 ARD	10000	N.E. Philadelphia
		WOONS	10000	Norwood & SO SATS
		**(1)** ORW V16 VCN OOD	10000	Philadelphia
		WOONS BOS PSM ENE	10000	Portland
		WOONS BOS	10000	Portsmouth
		PVD V151 GAILS	10000	Provincetown
		**(1)** ORW V16	10000	Richmond
		PUT ALB	10000	Rochester
		PVD V405 BDL V205 TRESA	10000	Stewart
		PUT ALB	10000	Syracuse
		**(1)** ORW V16 DIXIE V276 ARD	10000	Trenton

Approach Control Area (Including Satellites)		Route	Highest Altitude	Destination
		HFD	10000	Waterbury–Oxford
		SEY HTO V46 CCC	10000	Westhampton Beach
		PVD V167 HFD V1 MAD V475 BDR BDR288 RYMES	10000	White Plains
		HFD PWL V106 LHY	5000	Wilkes-Barre
		PUT	10000	Worcester
Providence/Groton		GON BAF V146	10000	Albany
		HFD PWL V106 WEETS HUO V162	5000	Allentown/Harrisburg
		**(1)** GON V374 CREAM V16 JFK V229	10000	Atlantic City
		ORW V16 BOS PSM ENE	10000	Augusta
		**(1)** GON V374 CREAM V16 ENO V268 SWANN	10000	Baltimore
		ORW V16 BOS PSM ENE BGR	10000	Bangor
		ORW V16 BOS PSM ENE	10000	Bar Harbor
		ORW V16 WOONS	10000	Bedford & NO SATS
		**(3)** ORW V16 WOONS	10000	Boston
		**(5)** PVD V151 INNDY	10000	Boston
		HFD	10000	Bradley
		GON V374 CREAM	10000	Bridgeport
		GON BAF V146 ALB V14	10000	Buffalo
		ORW V14 GDM V229	10000	Burlington
		ORW V16 WOONS MHT CON	10000	Concord
		**(3)** GON V374 CREAM BDR BDR288 RYMES	10000	Danbury
		**(5)** ORW BAF IGN V157 HAARP	10000	Danbury
		**(1)** GON V374 CREAM V16 ENO	10000	Dover AFB
		GON CTR V270	10000	Elmira
		GON CTR V270	10000	Erie
		GON V374 CREAM V16 DPK	10000	Farmingdale
		HFD	10000	Hartford
		PVD V151 GAILS	10000	Hyannis
		GON V374 V16 CCC	10000	Islip
		ORW V14 GDM	10000	Keene
		GON V374 CREAM V16 DPK	10000	Kennedy
		GON V374 CREAM BDR V475	10000	LaGuardia
		ORW V14 GDM V151	10000	Lebanon
		ORW V16 WOONS	10000	Manchester
		GON V374 MVY	10000	Marthas Vineyard
		**(1)** GON V374 CREAM V16 CYN	10000	McGuire AFB
		GON V58 NEWBE DEEPO	10000	Nantucket
		**(1)** GON HFD V229 SEALL V188 CMK V623 SAX	10000	Neward & SATS
		**(3)** GON HFD V3 CMK V623 SAX	10000	Newark & SATS
		GON V374 CREAM	10000	New Haven
		**(1)** GON V374 CREAM V16 DIXIE V276 ARD	10000	N.E. Philadelphia
		ORW V16 WOONS	10000	Norwood & SO SATS
		**(1)** GON V374 CREAM V16 VCN OOD	10000	Philadelphia
		ORW V16 WOONS BOS PSM ENE	10000	Portland
		ORW V16 WOONS BOS	10000	Portsmouth
		PVD V151 GAILS	10000	Provincetown
		**(1)** GON V374 CREAM V16	10000	Richmond
		GON BAF V146 ALB	10000	Rochester
		GON BDL V205 TRESA	10000	Stewart
		GON BAF V146 ALB	10000	Syracuse
		**(1)** GON V374 CREAM V16 DIXIE V276 ARD	10000	Trenton
		GON V374 CREAM	10000	Waterbury-Oxford
		GON V374 V16 CCC	10000	Westhampton Beach
		GON V374 CREAM BDR BDR288 RYMES	10000	White Plains
		HFD PWL V106 LHY	5000	Wilkes-Barre
		ORW V14 GRAYM	10000	Worcester
Reading		ETX	3000	Allentown
		BOYER V12 HAR	4000	Harrisburg
		V39	4000	Lancaster
		FJC BWZ	5000	Newark
		PTW	5000	No.Philadelphia
		MXE 355 BUNTS	5000	Philadelphia
		V93	5000	Wilkes-Barre
		MXE V29 DQO	5000	Wilmington
Richmond		V286 STEIN	5000	Norfolk
		V33 HCM	6000	Norfolk
		V38 HCM	9000	Norfolk

Approach Control Area (Including Satellites)		Route	Highest Altitude	Destination
		V16	5000	Patuxent River NAS
		V33	5000	Patuxent River
		V376	8000	Washington
		V155	4000	Washington
		BRV	5000	Washington
Roanoke		PSK V45	7000	Greensboro
		V103	10000	Greensboro
Rochester		V31 V14	10000	Albany
		V119 GEE V252	8000	Binghamton
		V2	10000	Buffalo
		V119 GEE V464 DKK V14 MENTO	10000	Cleveland
		V119 GEE V464	10000	Dunkirk
		V147	8000	Elmira
		V119 GEE V464 DKK V14	10000	Erie
		V34 BEEPS	8000	Ithaca
		V2 BUF V115	6000	Jamestown
		V119 GEE V464 LANGS V115	10000	Jamestown
		V510 EHMAN	10000	Niagara Falls
		V119 GEE V464 DKK V14 ERI V37 (Overflight traffic only)	10000	Pittsburgh
		V2	10000	Syracuse
		V119 GEE V464 DKK V14 ERI V43	10000	Youngstown
Syracuse		VESPE V14 ALB	10000	Albany
		V483 SHERB V14 ALB GDM V431 LOBBY	10000	Bedford
		V29	6000	Binghamton
		V483 SHERB V14 ALB GDM V431 REVER	10000	Boston
		ALB	10000	Bradley
		RKA V433 PETER V270 ATHOS V44 DENNA	10000	Bridgeport
		**(3)** RKA V433 TRESA V123 HAARP	10000	Danbury
		V35	8000	Elmira
		V29 V428	8000	Elmira
		ALB V130 BDL GON	10000	Groton
		ALB	10000	Hartford
		ALB V130 BDL V405 PVD V151 GAILS	10000	Hyannis
		ALB V130 BDL V405 MVY	10000	Marthas Vineyard
		ALB V130 BDL V405 MVY	10000	Nantucket
		V483 SHERB V14 ALB GDM V431 LOBBY	10000	Norwood
		CAM CON	10000	Portland
		ALB V130 BDL V405 PVD	10000	Providence
		ALB V130 BDL V405 PVD V151 GAILS	10000	Provincetown
		V14	10000	Rochester
		ALB V130 MOLDS	10000	Worcester
Washington		DIRECT	4000	Baltimore
		DIRECT	3000	Dulles
		V265	5000	Harrisburg
		V265 V457 LRP	5000	Lancaster
		V265 EMI V419 MXE ARD V214 METRO (−180 kts only)	7000	Newark
		DIRECT	3000	Patuxent River NAS
		V123 V433 DQO	7000	Philadelphia
		V155 COATT	8000	Richmond
		BRV	6000	Richmond
		V286	5000	Richmond
		BAL V378 MXE V3 SBJ TEB (−180 kts only)	7000	Teterboro
Westchester (See New York/Westchester)				
Wilkes-Barre		V164 ETX	5000	Allentown
		V29	8000	Binghamton
		V149	8000	Binghamton
		V499	7000	Binghamton
		V147	8000	Elmira
		V36	8000	Elmira
		V106 SEG V31	8000	Harrisburg
		HZL RAV	8000	Harrisburg
		V93	6000	Lancaster
		V613 FJC BWZ (Non jets only)	5000	Newark
		V613 FJC BWZ (Jets only)	6000	Newark
		V93	6000	Reading

NORTH AMERICAN ROUTES FOR NORTH ATLANTIC TRAFFIC (NAR)

''NORTH AMERICAN ROUTE PROGRAM (NRP).''

Introduction

(a) The North American Route Program (NRP) is a joint FAA and NAV CANADA program, the objective of which is to harmonize and adopt common procedures, to the extent possible, for application to random route flight operations at and above FL 290 within the conterminous U.S. and Canada.

(b) The NRP will be implemented through various phases with the end goal of allowing all international and domestic flight operations to participate in the NRP throughout the conterminous U.S., Alaska, and Canada.

(c) Flights may participate in the NRP under specific guidelines and filing requirements:

1. provided the flight originates and terminates within conterminous U.S. and Canada; or,
2. for North Atlantic international flights operating within the North American Route (NAR) System.

FAA/NAV CANADA Common Procedures

The following common FAA and NAV CANADA procedures apply:

(a) Flights to operate at or above FL 290.

(b) For that portion of flight within 200 NM of the departure or destination airport, flights shall be filed and operated via Standard Instrument Departures (SID), Departure Procedures (DP), Standard Terminal Arrival Routes (STAR) or published Preferred IFR Routes. If none of the above are available, airways may be used.

(c) NRP flights are not normally subject to routing restrictions such as published Preferred IFR Routes or airways, beyond a 200 NM radius of both the departure and destination airports.

(d) Flight planning requirements are:

1. routes shall contain at least one significant point in each delegated area of airspace jurisdiction for each FAA Air Route Traffic Control Center (ARTCC) or Canadian FIR/CTA;
2. significant points may be a navigational aid or waypoint defined in fix-radial distance (FRD) format from a navigational aid. Within Canadian airspace a significant point may also be a coordinate described in degrees and minutes of latitude/longitude;
3. for routes that cross the U.S./Canadian border, a significant point within 30 NM of either side of the border shall be filed;
4. significant points should be filed for all turnpoints;
5. route(s) shall avoid active Class F airspace;
6. ''NRP'' shall be entered in the Remarks section of the flight plan; and
7. flight plans to be filed at least one hour prior to departure.

(e) In the event that a NRP aircraft has to be recleared due to weather or tactical reasons, ATC will attempt to return the aircraft to the original NRP routing as soon as practical. Aircraft that depart from the NRP routing due to a pilot request or an ATC clearance authorizing a direct routing will be considered as a non participant of the NRP.

(f) Unless published routing restrictions are in effect, North Atlantic International flights planning to operate within the NAR System may file NRP routes beyond 200 NM of the NAR identified system airport and the published Inland Navigation Fixes (INFs).

Specific FAA Requirements

The following specific FAA requirements apply:

(a) Flights may not be filed via a DP/STAR within offshore transition areas (12 NM or more off the U.S. shoreline).

(b) Flights may be filed and flown on the complete transition of DPs and/or STARs for specific airports in lieu of the 200 NM route planning requirement described in Common Procedures, paragraph ''b'' above. For listing of the airports refer to the current FAA Advisory Circular–NRP.

(c) Flights not meeting the above guidelines are to be requested through the FAA nonpreferred route programs. Those requests will be approved/disapproved on a workload permitting basis.

NORTH AMERICAN ROUTE (NAR) SYSTEM

GENERAL

a. The objectives of the NAR System are as follows:

1. To expedite flight planning.
2. To reduce the complexity of route clearances and thereby minimize the confusion and error potential inherent in lengthy transmissions and readbacks; and
3. To minimize the time spent in the route clearance delivery function.

b. The NAR System is designed to accommodate major airports in North America where the volume of North Atlantic (NAT) traffic and route complexity dictate a need to meet the above objectives. It is for the use of traffic entering/exiting the NAT and consists of a series of pre–planned routes from/to coastal fixes and identified system airports. Most of the routes are divided into two portions:

1. Common Portion: That portion of the route between specified coastal fix and a specified inland navigation fix (INF). Some routes have a common portion only.
2. Non-common Portion: That portion of the route between a specified INF and a system airport. The routes are within the high level airspace structure with a transition to/from system airports.

c. The routes are prefixed by the abbreviation ''N'' with the numbering for the common portions orientated geographically from south to north. The ODD numbers have eastbound applications while the EVEN numbers apply to westbound. Following a one- to three-digit number, an alpha character indicates the validation codes and forms part of the route identifier. Validation codes are associated to amendments to the common routes only and not to non–common route portions.

d. Since a primary function of the NAR system is to compliment the NAT traffic flow; a limited number of NAR routes, appropriate for the coastal fixes serving the organized OTS and the domestic traffic organization, are included in the daily NAT/OTS message published by the Gander and Shanwick Oceanic Area Centers.

e. Aircraft can only join the NAR system:

1. At an identified coastal fix; or
2. On departure from one of the identified system airports; or
3. At an identified INF.

FLIGHT PLANNING—GENERAL

Westbound

a. Westbound routes begin at the coastal fixes, thence along common route portions to an INF and then fan out along non common routes to selected system airports;

b. For aircraft proceeding to an identified system airport and the route of flight to destination is described by a single NAR designator, use the designator;

c. For aircraft proceeding to a non system airport but the route of flight is described by the common route portion to an identified INF, use the designator to the INF followed by a detailed routing to the destination.

Eastbound

a. Eastbound routes only have a common portion from the INF to a coastal fix;

b. When the route of flight is described by a single NAR designator, use the designator;

c. For aircraft departing from a non system airport, file via an appropriate detailed routing to the applicable INF and thence via the common portion to the coastal fix using the NAR designator;

General

For those cases not described above, a detailed routing is required.

NAR REQUIREMENT

General

a. Generally there is no requirement to flight plan and operate using the NAR system. However ATC requires eastbound aircraft intending to operate on the NAT OTS and operating wholly on or south of a line between the intersections BAREE and DOTTY to flight plan and operate using one of the NARs published on the daily OTS Message.

b. NARs may be assigned by air traffic control for the tactical management of air traffic in Canadian domestic airspace.

c. For operators who elect not to use the NAR system, the rules of the NRP apply.

ROUTE CLEARANCES

a. For aircraft operating within the NAR System, the ATC routing clearance and pilot readback will be indicated by the NAR designator, e.g., ''North American Route 105B'';

b. For aircraft operating in the NAR System, but only using the common route portion, the ATC routing clearance and pilot readback will be indicated by the NAR designator followed by the detailed routing;

c. For aircraft not operating in the NAR System, the ATC routing clearance and pilot readback will be via a detailed route;

d. Aircraft cleared to a system airport via a NAR designator are to follow the common and the non–common portion of the route to a system airport. If either the common or non–common portion of the issued NAR is incompatible or unacceptable, the pilot is to advise ATC accordingly.

DOCUMENTATION

a. It is expected that the following NAR documentation will be carried on the flight deck of each aircraft operating within the NAR system:

1. The current publications of NAV CANADA Canadian Flight Supplement; or Federal Aviation Administration Airport/Facility Directory Northeast U.S. (AFDNE); or another product which provides the current NAR; and

2. the information in the current NAT/OTS message.

b. Changes to the NAR routes are advertised in the monthly publication Notices to Airmen Publication (NTAP).

COMMON PROCEDURES FOR RADIO COMMUNICATIONS FAILURE

a. The following procedures are intended to provide general guidance for North Atlantic (NAT) aircraft experiencing a communications failure. These procedures are intended to complement and not supersede state procedures/regulations. It is not possible to provide guidance for all situations associated with a communications failure.

1. If so equipped, the pilot of an aircraft experiencing a two–way radio communications failure shall:

i. operate the secondary radar transponder on identity Mode A) Code 7600 and Mode C; and

ii. attempt to contact any ATC facility or another aircraft and inform them of the difficulty and request they relay information to the ATC facility with whom communications are intended.

b. Communications failure prior to entering NAT oceanic airspace

1. If operating with a received and acknowledged oceanic clearance, the pilot shall enter oceanic airspace at the cleared oceanic entry point, level and speed and proceed in accordance with the received and acknowledged oceanic clearance. Any level or speed changes required to comply with the oceanic clearance shall be completed within the vicinity of the oceanic entry point.

2. If operating without a received and acknowledged oceanic clearance, the pilot shall enter oceanic airspace at the first oceanic entry point, level and speed, as contained in the filed flight plan and proceed via the filed flight plan route to landfall. That first oceanic level and speed shall be maintained to landfall.

c. Communications failure prior to exiting NAT oceanic airspace

1. Cleared on flight plan route

The pilot shall proceed in accordance with the last received and acknowledged oceanic clearance to the last specified oceanic route point, normally landfall, then continue on the flight plan route. Maintain the last assigned oceanic level and speed to landfall. After passing the last specified oceanic route point, conform with the relevant State procedures/regulations.

2. Cleared on other than flight plan route

The pilot shall proceed in accordance with the last received and acknowledged oceanic clearance to the last specified oceanic route point, normally landfall. After passing this point, rejoin the filed flight plan route by proceeding directly to the next significant point ahead of the track of the aircraft as contained in the filed flight plan. Where possible use published ATS route structures, then continue on the flight plan route. Maintain the last assigned oceanic level and speed to the last specified oceanic route point. After this point conform with the relevant State procedures/regulations.

NORTH AMERICAN ROUTES (NAR)

The following listing divides the NAR Route descriptions into two sections according to the direction of flight (eastbound or westbound). Each section is subdivided according to the route portion (common or non-common). The common portion describes the NAR route between the Coastal Fix and the Inland Navigational Facility/Fix. The non-common portion describes the route between the NAR route system airport being used and the Inland Navigational Facility/Fix.

COMMON PORTION (EASTBOUND)

NAR Designator	Inland Navigation Facility/Fix	Route Description	Coastal Fix
N5B	SIE	B24 LYNUS	SLATN
N7A	MANTA	OWENZ LINND R56	SLATN
N13C	SIE	B24 LYNUS	JOBOC
N15B	MANTA	OWENZ LINND R56 KENDA	JOBOC
N17B	VITOL	Direct	CARAC
N19B	ALLEX	Direct	CARAC
N21C	VITOL	LOMPI	JAROM
N23E	WHALE	LOMPI	JAROM
N25B	EBONY	LOMPI	JAROM
N27A	VITOL	NANSO	RAFIN
N29B	WHALE	NANSO	RAFIN
N31E	KANNI	NANSO	RAFIN
N33C	MIILS	Direct	BANCS
N35A	WHALE	Direct	BANCS
N37B	KANNI	Direct	BANCS
N39A	BRADD	Direct	BANCS
N41C	MIILS	Direct	BANCS
N43A	KANNI	Direct	COLOR
N45B	BRADD	Direct	COLOR

NAR Designator	Inland Navigation Facility/Fix	Route Description	Coastal Fix
N47A	TUSKY	Direct	COLOR
N49A	MIILS	Direct	COLOR
N51B	KANNI	Direct	YYT
N53B	BRADD	Direct	YYT
N55B	TUSKY	Direct	YYT
N57B	ALLEX	Direct	YYT
N59A	MIILS	Direct	YYT
N61B	BRADD	Direct	VIXUN
N63B	TUSKY	Direct	VIXUN
N65B	ALLEX	Direct	VIXUN
N67B	MIILS	Direct	VIXUN
N75B	BRADD	Direct	YQX
N77B	TUSKY	Direct	YQX
N79B	ALLEX	Direct	YQX
N81B	EBONY	Direct	YQX
N83B	MIILS	Direct	YQX
N85A	CEFOU	Direct	YQX
N91B	TUSKY	Direct	CYMON
N93B	ALLEX	Direct	CYMON
N95B	EBONY	Direct	CYMON
N97B	MIILS	Direct	CYMON
N99A	CEFOU	Direct	CYMON
N105B	TUSKY	Direct	DOTTY
N107B	ALLEX	Direct	DOTTY
N109B	EBONY	Direct	DOTTY
N111B	TOPPS	Direct	DOTTY
N113B	MIILS	Direct	DOTTY
N115B	BAREE	Direct	DOTTY
N121B	ALLEX	Direct	YAY
N123A	EBONY	Direct	YAY
N125A	TOPPS	Direct	YAY
N127A	MIILS	Direct	YAY
N129B	BAREE	Direct	YAY
N135B	EBONY	Direct	REDBY
N137B	TOPPS	Direct	REDBY
N139C	TAFFY	Direct	REDBY
N141B	BAREE	Direct	REDBY
N149B	TOPPS	Direct	STEAM
N151E	MIILS	Direct	STEAM
N153C	TAFFY	Direct	STEAM
N155A	ANCER	Direct	STEAM
N161E	TOPPS	Direct	VALIE
N163E	MIILS	Direct	VALIE
N165E	TAFFY	Direct	VALIE
N167E	QUBIS	Direct	VALIE
N169A	ANCER	Direct	VALIE
N171A	YBG	Direct	VALIE
N173B	TOPPS	Direct	FOXXE
N175C	MIILS	Direct	FOXXE
N177C	TAFFY	Direct	FOXXE
N179C	QUBIS	Direct	FOXXE
N181E	ANCER	Direct	FOXXE
N183C	YBG	Direct	FOXXE
N185A	RJ	Direct	FOXXE
N193E	MIILS	Direct	HO
N195C	TAFFY	Direct	HO
N197C	QUBIS	Direct	HO
N209B	TAFFY	Direct	YDP
N211C	QUBIS	Direct	YDP
N225B	TAFFY	Direct	LOMTA
N227B	QUBIS	Direct	LOMTA

COMMON PORTION (WESTBOUND)

NAR Designator	Coastal Fix	Route Description	Inland Navigation Facility/Fix
N10A	SLATN	Direct	BERGH
N12B	SLATN	J97	LACKS
N14A	JOBOC	Direct	BERGH
N16A	JOBOC	Direct	SAILE
N18C	DOVEY	Direct	SAILE
N36E	CARAC	Direct	VITOL
N38E	CARAC	Direct	WHALE
N40E	CARAC	Direct	KANNI
N42B	CARAC	Direct	BRADD
N44B	CARAC	Direct	TOPPS
N46E	JAROM	LOMPI	WHALE
N48E	JAROM	LOMPI	KANNI
N50E	JAROM	LOMPI	BRADD
N52E	JAROM	LOMPI	TUSKY
N54E	JAROM	LOMPI	TOPPS
N56E	RAFIN	NANSO	VITOL
N58B	RAFIN	NANSO	WHALE
N608	RAFIN	NANSO	KANNI
N62A	RAFIN	Direct	BRADD
N64C	RAFIN	Direct	TUSKY
N66C	BANCS	Direct	MIILS
N68C	BANCS	Direct	VITOL
N70B	BANCS	Direct	WHALE
N72B	BANCS	Direct	KANNI
N74B	BANCS	Direct	BRADD
N76A	BANCS	Direct	TUSKY
N78A	BANCS	Direct	MIILS
N80B	COLOR	Direct	WHALE
N82B	COLOR	Direct	KANNI
N84B	COLOR	Direct	BRADD
N86B	COLOR	Direct	TUSKY
N88A	COLOR	Direct	MIILS
N94A	YYT	Direct	KANNI
N96A	YYT	Direct	BRADD
N98A	YYT	Direct	TUSKY
N100B	YYT	Direct	ALLEX
N102B	YYT	Direct	MIILS
N112B	VIXUN	Direct	TUSKY
N114C	VIXUN	Direct	ALLEX
N116A	VIXUN	Direct	MIILS
N118A	VIXUN	Direct	MIILS
N124B	YQX	Direct	TUSKY
N126B	YQX	Direct	ALLEX
N128B	YQX	Direct	EBONY
N130C	YQX	Direct	MIILS
N142B	CYMON	Direct	ALLEX
N144B	CYMON	Direct	EBONY
N146B	CYMON	Direct	TOPPS
N148B	CYMON	Direct	MIILS
N160C	DOTTY	Direct	ALLEX
N162B	DOTTY	Direct	TOPPS
N164B	DOTTY	Direct	MIILS
N168B	DOTTY	Direct	YXU
N170E	DOTTY	YRI	COVAN
N180B	YAY	Direct	ALLEX
N184B	YAY	Direct	TOPPS
N186C	YAY	Direct	TOPPS
N188B	YAY	Direct	YRI
N190C	YAY	YRI	COVAN
N200B	REDBY	Direct	ALLEX
N202B	REDBY	Direct	TOPPS
N204B	REDBY	Direct	TAFFY
N206C	REDBY	Direct	YRI
N208F	REDBY	YRI	COVAN
N220B	STEAM	Direct	TOPPS
N224E	STEAM	BOBBS	TAFFY
N228B	STEAM	Direct	YRI

NAR Designator	Coastal Fix	Route Description	Inland Navigation Facility/Fix
N230E	STEAM	YRI	COVAN
N240C	VALIE	Direct	TOPPS
N242B	VALIE	Direct	TAFFY
N248C	VALIE	Direct	YBC
N250F	VALIE	YBC YRI	COVAN
N254A	VALIE	ROBBE	MOFAT
N258A	VALIE	ROBBE MOFAT YOW J559	SYR
N260A	VALIE	ROBBE	MT
N264A	FOXXE	Direct	TAFFY
N268B	FOXXE	Direct	QUBIS
N270B	FOXXE	Direct	YBC
N272E	FOXXE	YBC YRI	COVAN
N276A	FOXXE	SPOTE ROBBE	MOFAT
N280A	FOXXE	SPOTE ROBBE MOFAT YOW J559	SYR
N282A	FOXXE	SPOTE	MT
N284B	HO	Direct	TAFFY
N288C	HO	Direct	QUBIS
N292C	HO	Direct	YBC
N294E	HO	YBC YRI	COVAN
N296E	HO	KELVI	SYR*
N302C	HO	SPOTE ROBBE	MOFAT
N306C	HO	SPOTE ROBBE MOFAT YOW J559	SYR
N308E	HO	YWK	MT
N312A	HO	MT YUY	SSM
N322B	YDP	Direct	TAFFY
N326B	YDP	Direct	QUBIS
N328C	YDP	Direct	YBC
N332C	YDP	Direct	COVAN*
N334E	YDP	YBC YRI	COVAN
N338C	YDP	J583 YWK	MOFAT
N344B	YDP	YMX	SYR*
N346A	YDP	BROME NOWAA	MT
N352C	YDP	BROME NOWAA YOW MT J559	SYR
N354C	YDP	J583 YWK MOFAT YOW YUL J559	SYR
N356C	YDP	YKL	ROUND
N358B	YDP	JOVIE HENDY SELBO CANSO	SSM
N362B	YDP	YKL ROUND CANSO	SSM
N372C	LOMTA	Direct	TAFFY
N374C	LOMTA	Direct	QUBIS
N376C	LOMTA	Direct	YBC
N378F	LOMTA	Direct	COVAN
N382H	LOMTA	YBC YRI	COVAN
N386G	LOMTA	YMX	SYR*
N392E	LOMTA	YKL ROBBE	MOFAT
N396C	LOMTA	TEALS	VANSI
N398B	LOMTA	YKL ROBBE MOFAT YOW J559	SYR
N402E	LOMTA	TEALS VANSI STAFE	SSM
N412B	LAKES	Direct	TAFFY
N414C	LAKES	HINGE TEALS	MOFAT
N424E	LAKES	MCKEE GELLS	MT
N428C	LAKES	MCKEE GELLS MT YOW J559	SYR
N432B	LAKES	HINGE TEALS MOFAT YOW J559	SYR
N434C	LAKES	MCKEE MEMSO GRAMP LORNE	SSM
N436A	LAKES	DUSMA	TRUDY
N464E	LOPVI	KLIPS	MT
N468E	LOPVI	KLIPS MT YOW J559	SYR
N472E	LOPVI	PELSI SOCAN VETRO	SSM
N474E	LOPVI	FASSA GW GRAVO	TRUDY
N484C	RODBO	SEMTO HENDY	MT
N492B	ELSET	COPUR	ROUND
N494C	RODBO	SEMTO HENDY YOW J559	SYR
N496C	RODBO	SEMTO VEPTU PEMLU	SSM
N498C	RODBO	COPUR CHARN DURIL	YQT
N512C	JELCO	Direct	VANSI
N514C	JELCO	VANSI YOW J559	SYR
N516H	JELCO	HELMO YMO JARRO	SSM

NAR Designator	Coastal Fix	Route Description	Inland Navigation Facility/Fix
N518C	JELCO	GRAND SEGAN	YQT
N522C	JELCO	SCA JULIETT RIONA	VBI
N528A	FEDDY	GW PELEE YXZ	SSM

* NOTE:
Routes through Bagotville (YBG) Military Advisory Areas (CYAs) only available from 2300 UTC (DT2200 UTC) Fri to 1100 UTC (DT 1000 UTC) Mon unless declared active by NOTAM.

NON-COMMON PORTION (WESTBOUND)

VIA ALLEX

Inland Navigation Facility/Fix	Non-Common Portion	Destination
ALLEX	EMJAY J174 ATR085 radial ATR V308 OTT	ANDREWS
ALLEX	ENE BAF J77 PTW J48 MOL FLCON Arrival	ATLANTA
ALLEX	ENE NELIE J75 MXE V378 BAL	BALTIMORE
ALLEX	SCUPP	BOSTON
ALLEX	EMJAY J174	CHARLESTON, SC
ALLEX	ENE NELIE J75 CMK J75 GVE LYH Sudsy Arrival	CHARLOTTE
ALLEX	ENE BAF J77 SAX J6 LIT BYP	DALLAS/FT. WORTH
ALLEX	SEAER J79 LFV J174 HTO J121 SIE	DOVER
ALLEX	ENE BAF J77 SAX J6 LRP Delro Arrival	DULLES
ALLEX	EMJAY J174 SWL CEBEE WETRO ILM AR21 CRANS Fisel Arrival	FT. LAUDERDALE
ALLEX	ENE BAF J77 PTW J48 MOL J22 VUZ JAN AEX Daisetta Arrival	HOUSTON
ALLEX	ENE Parch Arrival	KENNEDY
ALLEX	SEAER J79 LFV J174 HTO J121 DRIFT V312 CYN	MCGUIRE
ALLEX	EMJAY J174 SWL CEBEE WETRO DIW AR22 JORAY Hiley Arrival	MIAMI
ALLEX	HANAA ALB V213 SAX	NEWARK
ALLEX	EMJAY J174 ORF J121 CHS J79 OMN Bitho Arrival	ORLANDO
ALLEX	SEAER J79 LFV J174 HTO J121 BRIGS VCN Cedar Lake Arrival	PHILADELPHIA
ALLEX	ENE CTR HNK HNK271 radial J190 SLT Grace Arrival	PITTSBURGH
ALLEX	EMJAY J174 SWL Argal Arrival	RALEIGH-DURHAM
ALLEX	ENE BAF J77 SAX J80 VHP Vandalia Arrival	ST LOUIS
ALLEX	ENE NELIE J75 CMK J75 TAY Dades Arrival	TAMPA

VIA BERGH

Inland Navigation Facility/Fix	Non-Common Portion	Destination
BERGH	L454 OWENZ DRIFT J121 SIE	DOVER
BERGH	L454 J62 RBV RBV289 radial V457 LRP V143 MULRR AML	DULLES
BERGH	L454 OWENZ CAMRN	KENNEDY
BERGH	L454 OWENZ MANTA V276 GAMBY	MCGUIRE
BERGH	L454 OWENZ V139 BRIGS V577 VCN Cedar Lake Arrival	PHILADELPHIA

VIA BRADD

Inland Navgation Facility/Fix	Non-Common Portion	Destination
BRADD	LFV J174 ATR085 radial ATR V308 OTT	ANDREWS
BRADD	BOS J77 PTW J48 MOL FLCON Arrival	ATLANTA
BRADD	BOS J75 MXE V378 BAL	BALTIMORE
BRADD	SCUPP	BOSTON
BRADD	LFV J174	CHARLESTON, SC
BRADD	BOS J75 CMK J75 GVE LYH Sudsy Arrival	CHARLOTTE
BRADD	BOS J77 SAX J6 LIT BYP	DALLAS/FT. WORTH
BRADD	LFV J174 HTO J121 SIE	DOVER
BRADD	BOS J77 SAX J6 LRP Delro Arrival	DULLES
BRADD	ACK J62 RIFLE J174 SWL CEBEE WETRO ILM AR21 CRANS Fisel Arrival	FT. LAUDERDALE
BRADD	BOS J77 PTW J48 MOL J22 VUZ JAN AEX Daisetta Arrival	HOUSTON
BRADD	PLYMM Parch Arrival	KENNEDY
BRADD	LFV J174 HTO J121 DRIFT V312 CYN	MCGUIRE

Inland Navgation Facility/Fix	Non-Common Portion	Destination
BRADD	ACK J62 RIFLE J174 SWL CEBEE WETRO DIW AR22 JORAY Hiley Arrival	MIAMI
BRADD	BOS BAF Shaff Arrival	NEWARK
BRADD	LFV J150 HTO J174 ORF J121 CHS J79 OMN Bitho Arrival	ORLANDO
BRADD	LFV J174 HTO J121 BRIGS VCN Cedar Lake Arrival	PHILADELPHIA
BRADD	BOS CTR HNK HNK271 radial J190 SLT Grace Arrival	PITTSBURGH
BRADD	ACK J62 RIFLE J174 SWL Argal Arrival	RALEIGH-DURHAM
BRADD	BOS J77 SAX J80 VHP Vandalia Arrival	ST. LOUIS
BRADD	BOS J75 CMK J75 TAY Dades Arrival	TAMPA

VIA COVAN

Inland Navigation Facility/Fix	Non-Common Portion	Destination
COVAN	ALB J37 J75 MXE V378 BAL	ANDREWS
COVAN	ALB J6 SAX J77 PTW J48 ODF FLCON Arrival	ATLANTA
COVAN	ALB PWL CMK J75 MXE V378 BAL	BALTIMORE
COVAN	ALB J6 SAX J77 PTW J48 EMI J61 HUBBS J193 WEAVR J121 CHS	CHARLESTON, SC
COVAN	ALB PWL CMK J75 GVE LYH SUDSY Arrival	CHARLOTTE
COVAN	ALB J6 SAX J6 LIT BYP Arrival	DALLAS/FT. WORTH
COVAN	ALB J37 JFK CYN SIE	DOVER
COVAN	ALB J6 LRP DELRO Arrival	DULLES
COVAN	ALB J6 SAX J77 PTW J48 EMI J61 HUBBS J193 WEAVR J121 CHS J79 OMN FISEL Arrival	FT. LAUDERDALE
COVAN	ALB IGN IGN Arrival	KENNEDY
COVAN	ALB DNY LHY V93 LVZ V147 MAZIE	MCGUIRE
COVAN	ALB PWL CMK J75 CAE J51 SAV J103 OMN HILEY Arrival	MIAMI
COVAN	HANAA ALB V213 SAX	NEWARK
COVAN	ALB PWL CMK J75 CAE J75 DUNKN AMG LEESE Arrival	ORLANDO
COVAN	ALB DNY SLATT Arrival	PHILADELPHIA
COVAN	ALB J49 HNK HNK271 radial J190 SLT GRACE Arrival	PITTSBURGH
COVAN	ALB PWL CMK J75 TAY DADES Arrival	TAMPA

VIA EBONY

Inland Navigation Facility/Fix	Non-Common Portion	Destination
EBONY	EMJAY J174 ATR085 radial ATR V308 OTT	ANDREWS
EBONY	ENE BAF J77 PTW J48 MOL FLCON Arrival	ATLANTA
EBONY	ENE NELIE J75 MXE V378 BAL	BALTIMORE
EBONY	SCUPP	BOSTON
EBONY	EMJAY J174	CHARLESTON, SC
EBONY	ENE NELIE J75 CMK J75 GVE LYH Sudsy Arrival	CHARLOTTE
EBONY	ENE BAF J77 SAX J6 LIT BYP	DALLAS/FT.WORTH
EBONY	SEAER J79 LFV J174 HTO J121 SIE	DOVER
EBONY	ENE BAF J77 SAX J6 LRP Delro Arrival	DULLES
EBONY	EMJAY J174 SWL CEBEE WETRO ILM AR21 CRANS Fisel Arrival	FT. LAUDERDALE
EBONY	ENE BAF J77 PTW J48 MOL J22 VUZ JAN AEX Daisetta Arrival	HOUSTON
EBONY	ENE Parch Arrival	KENNEDY
EBONY	SEAER J79 LFV J174 HTO J121 DRIFT V312 CYN	MCGUIRE
EBONY	EMJAY J174 SWL CEBEE WETRO DIW AR22 JORAY Hiley Arrival	MIAMI
EBONY	HANAA ALB V213 SAX	NEWARK
EBONY	EMJAY J174 ORF J121 CHS J79 OMN Bitho Arrival	ORLANDO
EBONY	SEAER J79 LFV J174 HTO J121 BRIGS VCN Cedar Lake Arrival	PHILADELPHIA
EBONY	ENE CTR HNK HNK271 radial J190 SLT Grace Arrival	PITTSBURGH
EBONY	EMJAY J174 SWL Argal Arrival	RALEIGH-DURHAM
EBONY	ENE BAF J77 SAX J80 VHP Vandalia Arrival	ST. LOUIS
EBONY	ENE NELIE J75 CMK J75 TAY Dades Arrival	TAMPA

VIA KANNI

Inland Navigation Facility/Fix	Non-Common Portion	Destination
KANNI	LFV J174 ATR085 radial ATR V308 OTT	ANDREWS
KANNI	BOS J77 PTW J48 MOL FLCON Arrival	ATLANTA
KANNI	BOS J75 MXE V378 BAL	BALTIMORE
KANNI	SCUPP	BOSTON
KANNI	LFV J174	CHARLESTON, SC
KANNI	BOS J75 CMK J75 GVE LYH Sudsy Arrival	CHARLOTTE
KANNI	BOS J77 SAX J6 LIT BYP	DALLAS/FT. WORTH
KANNI	LFV J174 HTO J121 SIE	DOVER
KANNI	BOS J77 SAX J6 LRP Delro Arrival	DULLES
KANNI	ACK J62 RIFLE J174 SWL CEBEE WETRO ILM AR21 CRANS Fisel Arrival	FT. LAUDERDALE
KANNI	BOS J77 PTW J48 MOL J22 VUZ JAN AEX Daisetta Arrival	HOUSTON
KANNI	PLYMM Parch Arrival	KENNEDY
KANNI	LFV J174 HTO J121 DRIFT V312 CYN	MCGUIRE
KANNI	ACK J62 RIFLE J174 SWL CEBEE WETRO DIW AR22 JORAY Hiley Arrival	MIAMI
KANNI	BOS BAF Shaff Arrival	NEWARK
KANNI	LFV J150 HTO J174 ORF J121 CHS J79 OMN Bitho Arrival	ORLANDO
KANNI	LFV J174 HTO J121 BRIGS VCN Cedar Lake Arrival	PHILADELPHIA
KANNI	BOS CTR HNK HNK271 radial J190 SLT Grace Arrival	PITTSBURGH
KANNI	ACK J62 RIFLE J174 SWL Argal Arrival	RALEIGH-DURHAM
KANNI	BOS J77 SAX J80 VHP Vandalia Arrival	ST.LOUIS
KANNI	BOS J75 CMK J75 TAY Dades Arrival	TAMPA

VIA LACKS

Inland Navigation Facility/Fix	Non-Common Portion	Destination
LACKS	J97 ACK SCUPP	BOSTON

VIA MIILS

Inland Navigation Facility/Fix	Non-Common Portion	Destination
MIILS	ENE BAF J77 PTW J48 MOL FLCON Arrival	ATLANTA
MIILS	YOW J553 ECK FNT PAITN Arrival	CHICAGO
MIILS	YMX J546 YSO J558 YXU J545 DJB J83 APE Cince Arrival	CINCINNATI
MIILS	YMX J546 YSO J558 YXU J545 DJB J29 PXV J131 LIT BYP	DALLAS/FT. WORTH
MIILS	YMX J546 YSO J597 YQO V464 Spica Arrival	DETROIT
MIILS	YMX J546 YSO J558 YXU J545 DJB J29 PXV J131 LIT J180 DAS Daisetta Arrival	HOUSTON
MIILS	VLV J509 V352 OMBRE Ombre Arrival	MONTREAL/TRUDEAU
MIILS	ATENE CATOG Catog Arrival	MONTREAL/MIRABEL
MIILS	YXI YEE ECK GIJ RBS Vandalia Arrival	ST. LOUIS*
MIILS	YMX J546 V300 YSO J37	TORONTO

* NOTE:
St. Louis route useable only for aircraft at or above FL350.

VIA MOFAT

Inland Navigation Facility/Fix	Non-Common Portion	Destination
MOFAT	ALB J37 J75 MXE V378 BAL	ANDREWS
MOFAT	TVC OBK J73 BNA Rome Arrival	ATLANTA
MOFAT	ALB PWL CMK J75 MXE V378 BAL	BALTIMORE
MOFAT	ALB J6 SAX J77 PTW J61 HUBBS J193 WEAVR J121 CHS	CHARLESTON
MOFAT	ALB PWL CMK J75 GVE LYH Sudsy Arrival	CHARLOTTE
MOFAT	SEDOT ASP PAITN Arrival	CHICAGO
MOFAT	YXI J597 YSO J558 YXU J545 DJB J38 APE Cince Arrival	CINCINATTI
MOFAT	TVC BAE J105 RZC FSM BYP	DALLAS/FT. WORTH
MOFAT	SMARE ECK POLAR Polar Arrival	DETROIT
MOFAT	ALB J37 JFK CYN SIE	DOVER
MOFAT	ALB J6 LRP Delro Arrival	DULLES
MOFAT	ALB J6 SAX J77 PTW J48 EMI J61 HUBBS J93 WEAVR J121 CHS J79 OMN Fisel Arrival	FT. LAUDERDALE
MOFAT	TVC OBK J101 LIT J180 DAS Daisetta Arrival	HOUSTON
MOFAT	ALB IGN IGN Arrival	KENNEDY
MOFAT	ALB DNY LHY V93 LVZ V147 MAZIE	MCGUIRE
MOFAT	ALB PWL CMK J75 CAE J51 SAV J103 OMN HILEY Arrival	MIAMI
MOFAT	OBRET J570 YMX Mirabel Arrival	MONTREAL/MIRABEL
MOFAT	OBRET J570 YMX Antag Arrival	MONTREAL/TRUDEAU
MOFAT	ALB PWL CMK J75 CAE DUNKN AMG Leese Arrival	ORLANDO
MOFAT	ALB DNY Slatt Arrival	PHILADELPHIA
MOFAT	ALB J49 HNK HNK271 radial J190 SLT Grace Arrival	PITTSBURGH
MOFAT	TVC OBK J71 RBS Vandalia Arrival	ST. LOUIS
MOFAT	ALB CMK J75 Dades Arrival	TAMPA
MOFAT	YXI J597 V216 YSO JV37	TORONTO

VIA MT

Inland Navigation Facility/Fix	Non-Common Portion	Destination
MT	ALB J37 J75 MXE V378 BAL	ANDREWS
MT	TVC OBK J73 BNA Rome Arrival	ATLANTA
MT	ALB PWL CMK J75 MXE V378 BAL	BALTIMORE
MT	ALB J6 SAX J77 PTW J48 EMI J61 HUBBS J193 WEAVR J121 CHS	CHARLESTON
MT	ALB PWL CMK J75 GVE LYH Sudsy Arrival	CHARLOTTE
MT	SSM PAITN Arrival	CHICAGO
MT	YXI J597 YSO YXU J545 DJB J83 APE Cince Arrival	CINCINATTI
MT	TVC BAE J105 RZC FSM BYP	DALLAS/FT. WORTH
MT	SEDOT ECK POLAR POLAR ARRIVAL	DETROIT
MT	ALB J37 JFK CYN SIE	DOVER
MT	ALB J6 LRP Delro Arrival	DULLES
MT	ALB J6 SAX J77 PTW J48 EMI J61 HUBBS J93 WEAVR J121 CHS J79 OMN Fisel Arrival	FT. LAUDERDALE
MT	TVC OBK J101 LIT J180 DAS Daisetta Arrival	HOUSTON
MT	ALB IGN IGN Arrival	KENNEDY
MT	ALB DNY LHY V93 LVZ V147 MAZIE	MCGUIRE
MT	ALB PWL CMK J75 CAE J51 SAV J103 OMN Hiley Arrival	MIAMI
MT	J570 YMX Mirabel Arrival	MONTREAL/MIRABEL
MT	J570 YMX Antag Arrival	MONTREAL/TRUDEAU
MT	ALB PWL CMK J75 CAE J75 DUNKN AMG Leese Arrival	ORLANDO
MT	ALB DNY Slatt Arrival	PHILADELPHIA
MT	ALB J49 HNK HNK271 radial J190 SLT Grace Arrival	PITTSBURGH
MT	TVC OBK J71 RBS Vandalia Arrival	ST. LOUIS
MT	ALB CMK J75 TAY Dades Arrival	TAMPA
MT	YXI J597/V216 YSO V37	TORONTO

VIA NUCAR

Inland Navigation Facility/Fix	Non-Common Portion	Destination
NUCAR	NEPTA J58 AEX Scurry Arrival	DALLAS/FT WORTH
NUCAR	CRANS Fisel Arrival	FT. LAUDERDALE
NUCAR	JORAY Hiley Arrival	MIAMI
NUCAR	BAIRN Goofy Arrival	ORLANDO
NUCAR	BRDGE Brdge Arrival	TAMPA
NUCAR	AYBID Frway Arrival	PALM BEACH

VIA QUBIS

Inland Navigation Facility/Fix	Non-Common Portion	Destination
QUBIS	EMJAY J174 ATR085 radial ATR V308 OTT	ANDREWS
QUBIS	ALB J6 SAX J77 PTW J48 MOL FLCON Arrival	ATLANTA
QUBIS	ENE NELIE J75 MXE V378 BAL	BALTIMORE
QUBIS	SCUPP	BOSTON
QUBIS	EMJAY J174	CHARLESTON, SC
QUBIS	ENE NELIE J75 GVE LYH Sudsy Arrival	CHARLOTTE
QUBIS	ALB J6 LIT BYP	DALLAS/FT. WORTH
QUBIS	ALB J6 LRP Delro Arrival	DULLES
QUBIS	EMJAY J174 SWL CEBEE WETRO ILM AR21 CRANS Fisel Arrival	FT. LAUDERDALE
QUBIS	ENE BAF J77 PTW J48 MOL J22 VUZ JAN AEX Daisetta Arrival	HOUSTON
QUBIS	EMJAY J174 SWL CEBEE WETRO DIW AR22 JORAY Hiley Arrival	MIAMI
QUBIS	EMJAY J174 ORF J121 CHS J79 OMN Bitho Arrival	ORLANDO
QUBIS	ALB J49 HNK HNK271 radial J190 GRACE Grace Arrival	PITTSBURGH
QUBIS	EMJAY J174 SWL Argal Arrival	RALEIGH-DURHAM
QUBIS	ENE NELIE J75 CMK J75 TAY Dades Arrival	TAMPA

VIA ROUND

Inland Navigation Facility/Fix	Non-Common Portion	Destination
ROUND	TVC OBK J73 BNA Rome Arrival	ATLANTA
ROUND	SSM PAITN Arrival	CHICAGO
ROUND	YXI J597 YSO J558 YXU J545 DJB J83 APE Cince Arrival	CINCINATTI
ROUND	TVC BAE J105 RZC FSM BYP	DALLAS/FT. WORTH
ROUND	YVO SEDOT ECK POLAR Polar Arrival	DETROIT
ROUND	TVC OBK J101 LIT J180 DAS Daisetta Arrival	HOUSTON
ROUND	TVC OBK J71 RBS Vandalia Arrival	ST. LOUIS
ROUND	YXI J597 V216 YSO V37	TORONTO

VIA SAILE

Inland Navigation Facility/Fix	Non-Common Portion	Destination
SAILE	ACK HTO J174 ATR085 radial ATR V308 OTT	ANDREWS
SAILE	ACK HTO RBV V230 J48 MOL FLCON Arrival	ATLANTA
SAILE	SCUPP	BOSTON
SAILE	ACK HTO J174	CHARLESTON, SC
SAILE	ACK HTO J121 SIE	DOVER
SAILE	ACK J62 RBV RBV289 radial V457 LRP Delro Arrival	DULLES
SAILE	ACK J62 RIFLE J174 SWL CEBEE WETRO ILM AR21 CRANS Fisel Arrival	FT. LAUDERDALE
SAILE	PLYMM Parch Arrival	KENNEDY
SAILE	ACK HTO J121 DRIFT V312 CYN	MCGUIRE
SAILE	ACK J62 RIFLE J174 SWL CEBEE WETRO DIW AR22 JORAY Hiley Arrival	MIAMI
SAILE	BOS BAF Shaff Arrival	NEWARK
SAILE	ACK HTO J174 ORF J121 CHS J79 OMN Bitho Arrival	ORLANDO
SAILE	ACK HTO J121 BRIGS VCN Cedar Lake Arrival	PHILADELPHIA
SAILE	ACK J62 RIFLE J174 SWL Argal Arrival	RALEIGH-DURHAM
SAILE	NELIE J75 CMK J75 TAY Dades Arrival	TAMPA

VIA SSM

Inland Navigation Facility/Fix	Non-Common Portion	Destination
SSM	GRB J101 BAE J89 OBK J73 BNA Rome Arrival	ATLANTA
SSM	PAITN Arrival	CHICAGO
SSM	J101 BAE J105 RZC FSM BYP	DALLAS/FT. WORTH
SSM	GEP J114	DENVER
SSM	STL J101 LIT J180 DAS Daisetta Arrival	HOUSTON
SSM	EAU Eau Arrival	MINNEAPOLIS/ ST. PAUL
SSM	J548 TVC OBK J71 RBS Vandalia Arrival	ST. LOUIS

VIA SYR

Inland Navigation Facility/Fix	Non-Common Portion	Destination
SYR	FQM HAR V265 KOLBY PSB149 radial SHILO V93 BAL	ANDREWS
SYR	J59 PSB J78 HVQ J145 ODF FLCON Arrival	ATLANTA
SYR	FQM RAV V170 V499 TRISH	BALTIMORE
SYR	FQM HAR EMI J61 HUBBS J193 WEAVR J121 CHS	CHARLESTON, SC
SYR	J59 PSB J78 HVQ Johns Arrival	CHARLOTTE
SYR	J29 DJB J83 APE Cince Arrival	CINCINNATI
SYR	J29 PXV J131 LIT BYP	DALLAS/FT. WORTH
SYR	HAR LRP V210 SPERY	DOVER
SYR	J59 PSB PSB151 SEG201 HYPER Delro	DULLES
SYR	J29 PXV J131 LIT J180 DAS Daisetta Arrival	HOUSTON
SYR	IGN KINGSTON Arrival	KENNEDY
SYR	LVZ V147 MAZIE	McGUIRE
SYR	HNK V167 HELON V213 SAX	NEWARK
SYR	CFB SLATT Arrival	PHILADELPHIA
SYR	J29 JHW YNG CUTTA	PITTSBURGH
SYR	J29 ROD VHP Vandalia Arrival	ST. LOUIS

VIA TAFFY

Inland Navigation Facility/Fix	Non-Common Portion	Destination
TAFFY	EMJAY J174 ATR085 radial ATR V308 OTT	ANDREWS
TAFFY	ALB J6 SAX J77 PTW J48 MOL FLCON Arrival	ATLANTA
TAFFY	PQI J55 ENE NELIE J75 MXE V378 BAL	BALTIMORE
TAFFY	SCUPP	BOSTON
TAFFY	EMJAY J174	CHARLESTON, SC
TAFFY	ENE NELIE J75 CMK J75 GVE LYH Sudsy Arrival	CHARLOTTE
TAFFY	ALB J6 SAX J6 LIT BYP	DALLAS/FT.WORTH
TAFFY	SEAER J79 LFV J174 HTO J121 SIE	DOVER
TAFFY	ALB J6 LRP Delro Arrival	DULLES
TAFFY	EMJAY J174 SWL CEBEE WETRO ILM AR21 CRANS Fisel Arrival	FT. LAUDERDALE
TAFFY	ENE BAF J77 PTW J48 MOL J22 VUZ JAN AEX Daisetta Arrival	HOUSTON
TAFFY	ENE Parch Arrival	KENNEDY
TAFFY	SEAER J79 LFV J174 HTO J121 DRIFT V312 CYN	MCGUIRE
TAFFY	EMJAY J174 SWL CEBEE WETRO DIW AR22 JORAY Hiley Arrival	MIAMI
TAFFY	HANAA ALB V123 SAX	NEWARK
TAFFY	EMJAY J174 ORF J121 CHS J79 OMN Bitho Arrival	ORLANDO
TAFFY	SEAER J79 LFV J174 HTO J121 BRIGS VCN Cedar Lake Arrival	PHILADELPHIA
TAFFY	ENE CTR HNK HNK271 radial J190 SLT Grace Arrival	PITTSBURGH
TAFFY	EMJAY J174 SWL Argal Arrival	RALEIGH-DURHAM
TAFFY	ENE NELIE J75 CMK J75 TAY Dades Arrival	TAMPA

VIA TOPPS

Inland Navigation Facility/Fix	Non-Common Portion	Destination
TOPPS	EMJAY J174 ATR085 radial ATR V308 OTT	ANDREWS
TOPPS	ENE BAF J77 PTW J48 MOL FLCON Arrival	ATLANTA
TOPPS	ENE NELIE J75 MXE V378 BAL	BALTIMORE
TOPPS	SCUPP	BOSTON
TOPPS	EMJAY J174	CHARLESTON, SC
TOPPS	ENE NELIE J75 CMK J75 GVE LYH Sudsy Arrival	CHARLOTTE
TOPPS	YOW J553 ECK FNT PAITN Arrival	CHICAGO
TOPPS	YOW J546 YSO J558 YXU J545 DJB J83 APE Cince Arrival	CINCINNATI
TOPPS	ENE BAF J77 SAX J6 LIT BYP	DALLAS/FT. WORTH
TOPPS	YOW J546 YSO J597 YQO V464 Spica Arrival	DETROIT
TOPPS	SEAER J79 LFV J174 HTO J121 SIE	DOVER
TOPPS	ENE BAF J77 SAX J6 LRP Delro Arrival	DULLES
TOPPS	EMJAY J174 SWL CEBEE WETRO ILM AR21 CRANS Fisel Arrival	FT. LAUDERDALE
TOPPS	ENE BAF J77 PTW J48 MOL J22 VUZ JAN AEX Daisetta Arrival	HOUSTON
TOPPS	ENE Parch Arrival	KENNEDY
TOPPS	SEAER J79 LFV J174 HTO J121 DRIFT V312 CYN	MCGUIRE
TOPPS	EMJAY J174 SWL CEBEE WETRO DIW AR22 JORAY Hiley Arrival	MIAMI
TOPPS	HANAA ALB V213 SAX	NEWARK
TOPPS	EMJAY J174 ORF J121 CHS J79 OMN Bitho Arrival	ORLANDO
TOPPS	SEAER J79 LFV J174 HTO J121 BRIGS VCN Cedar Lake Arrival	PHILADELPHIA
TOPPS	ENE CTR HNK HNK271 radial J190 SLT Grace Arrival	PITTSBURGH
TOPPS	EMJAY J174 SWL Argal Arrival	RALEIGH-DURHAM
TOPPS	ENE BAF J77 SAX J80 VHP Vandalia Arrival	ST. LOUIS
TOPPS	ENE NELIE J75 CMK J75 TAY Dades Arrival	TAMPA
TOPPS	OMBRE Ombre Arrival	MONTREAL/TRUDEAU
TOPPS	VLV J565 V363 Catog Arrival	MONTREAL/MIRABEL
TOPPS	YOW J546 V300 YSO V37	TORONTO

VIA TUSKY

Inland Navigation Facility/Fix	Non-Common Portion	Destination
TUSKY	EMJAY J174 ATR085 radial ATR V308 OTT	ANDREWS
TUSKY	BOS J77 PTW J48 MOL FLCON Arrival	ATLANTA
TUSKY	BOS J75 MXE V378 BAL	BALTIMORE
TUSKY	SCUPP	BOSTON
TUSKY	EMJAY J174	CHARLESTON, SC
TUSKY	BOS J75 CMK J75 GVE LYH Sudsy Arrival	CHARLOTTE
TUSKY	BOS J77 SAX J6 LIT BYP	DALLAS/FT. WORTH
TUSKY	LFV J174 HTO J121 SIE	DOVER
TUSKY	BOS J77 SAX J6 LRP Delro Arrival	DULLES
TUSKY	EMJAY J174 SWL CEBEE WETRO ILM AR21 CRANS Fisel Arrival	FT. LAUDERDALE
TUSKY	BOS J77 PTW J48 MOL J22 VUZ JAN AEX Daisetta Arrival	HOUSTON
TUSKY	PLYMM Parch Arrival	KENNEDY
TUSKY	LFV J174 HTO J121 DRIFT V312 CYN	MCGUIRE
TUSKY	EMJAY J174 SWL CEBEE WETRO DIW AR22 JORAY Hiley Arrival	MIAMI
TUSKY	BOS BAF Shaff Arrival	NEWARK
TUSKY	EMJAY J174 ORF J121 CHS J79 OMN Bitho Arrival	ORLANDO
TUSKY	LFV J174 HTO J121 BRIGS VCN Cedar Lake Arrival	PHILADELPHIA
TUSKY	BOS CTR HNK HNK271 radial J190 SLT Grace Arrival	PITTSBURGH
TUSKY	EMJAY J174 SWL Argal Arrival	RALEIGH-DURHAM
TUSKY	BOS J77 SAX J80 VHP Vandalia Arrival	ST.LOUIS
TUSKY	BOS J75 CMK J75 TAY Dades Arrival	TAMPA

VIA VANSI

Inland Navigation Facility/Fix	Non-Common Portion	Destination
VANSI	TVC OBK J73 BNA Rome Arrival	ATLANTA
VANSI	SSM PAITN Arrival	CHICAGO
VANSI	YXI J597 YSO J558 YXU J545 DJB J83 APE Cince Arrival	CINCINATTI
VANSI	TVC BAE J105 RZC FSM BYP	DALLAS/FT. WORTH
VANSI	YVO SEDOT ECK POLAR Polar Arrival	DETROIT
VANSI	TVC OBK J101 LIT J180 DAS Daisetta Arrival	HOUSTON
VANSI	TVC OBX J71 RBS Vandalia Arrival	ST LOUIS
VANSI	YXI J597 V216 YSO V37	TORONTO

VIA VITOL

Inland Navigation Facility/Fix	Non-Common Portion	Destination
VITOL	ACK HTO J174 ATR085 radial ATR V308 OTT	ANDREWS
VITOL	ACK HTO RBV J230 J48 MOL FLCON Arrival	ATLANTA
VITOL	SCUPP	BOSTON
VITOL	ACK HTO J174	CHARLESTON, SC
VITOL	ACK HTO J121 SIE	DOVER
VITOL	ACK J62 RBV RBV289 radial V457 LRP Delro Arrival	DULLES
VITOL	ACK J62 RIFLE J174 SWL CEBEE WETRO ILM AR21 CRANS Fisel Arrival	FT. LAUDERDALE
VITOL	PLYMM Parch Arrival	KENNEDY
VITOL	ACK HTO J121 DRIFT V312 CYN	MCGUIRE
VITOL	ACK J62 RIFLE J174 SWL CEBEE WETRO DIW AR22 JORAY Hiley Arrival	MIAMI
VITOL	BOS BAF Shaff Arrival	NEWARK
VITOL	ACK HTO J174 ORF J121 CHS J79 OMN Bitho Arrival	ORLANDO
VITOL	ACK HTO J121 BRIGS VCN Cedar Lake Arrival	PHILADELPHIA
VITOL	ACK J62 RIFLE J174 SWL Argal Arrival	RALEIGH-DURHAM
VITOL	NELIE J75 CMK J75 TAY Dades Arrival	TAMPA

VIA WHALE

Inland Navigation Facility/Fix	Non-Common Portion	Destination
WHALE	LFV J174 ATR085 radial ATR V308 OTT	ANDREWS
WHALE	BOS J77 PTW J48 MOL FLCON Arrival	ATLANTA
WHALE	BOS J75 MXE V378 BAL	BALTIMORE
WHALE	SCUPP	BOSTON
WHALE	LFV J174	CHARLESTON, SC
WHALE	BOS J75 CMK J75 GVE LYH Sudsy Arrival	CHARLOTTE
WHALE	BOS J77 SAX J6 LIT BYP	DALLAS/FT. WORTH
WHALE	LFV J174 HTO J121 SIE	DOVER
WHALE	BOS J77 SAX J6 LRP V143 Delro Arrival	DULLES
WHALE	ACK J62 RIFLE J174 SWL CEBEE WETRO ILM AR21 CRANS Fisel Arrival	FT. LAUDERDALE
WHALE	BOS J77 PTW J48 MOL J22 VUZ JAN AEX Daisetta Arrival	HOUSTON
WHALE	PLYMM Parch Arrival	KENNEDY
WHALE	LFV J174 HTO J121 DRIFT V312 CYN	MCGUIRE
WHALE	LFV J174 SWL CEBEE WETRO DIW AR22 JORAY Hiley Arrival	MIAMI
WHALE	BOS BAF Shaff Arrival	NEWARK
WHALE	LFV J150 HTO J174 ORF J121 CHS J79 OMN Bitho Arrival	ORLANDO
WHALE	LFV J174 HTO J121 BRIGS VCN Cedar Lake Arrival	PHILADELPHIA
WHALE	BOS CTR HNK HNK271 radial J190 SLT Grace Arrival	PITTSBURGH
WHALE	ACK J62 RIFLE J174 SWL Argal Arrival	RALEIGH-DURHAM
WHALE	BOS J77 SAX J80 VHP Vandalia Arriva	ST. LOUIS
WHALE	BOS J75 CMK J75 TAY Dades Arrival	TAMPA

VIA YBC

Inland Navigation Facility/Fix	Non-Common Portion	Destination
YBC	VBS POLTY YSO YXU J545 DJB J83 APE J186 SOT FLCON Arrival	ATLANTA
YBC	VBS SEDOT ECK FNT PAITN Arrival	CHICAGO
YBC	VBS POLTY YSO YXU J545 DJB J83 APE Cince Arrival	CINCINNATI
YBC	VBS POLTY YSO YXU J545 DJB J29 PXV J131 LIT BYP	DALLAS/FT WORTH
YBC	VBS YXI YVV ECK POLAR Polar Arrival	DETROIT
YBC	VBS POLTY YSO YXU J545 DJB J29 PXV J131 LIT J180 DAS Daisetta Arrival	HOUSTON
YBC	BLAKK Catog Arrival	MONTREAL/MIRABEL
YBC	BLAKK OMBRE Ombre Arrival	MONTREAL/TRUDEAU
YBC	VBS YXI YEE ECK GIJ RBS Vandalia Arrival	ST. LOUIS
YBC	YMX J546 V300 YSO V37	TORONTO

VIA YRI

Inland Navigation Facility/Fix	Non-Common Portion	Destination
YRI	POLTY YSO YXU J545 DJB J83 APE J186 SOT FLCON Arrival	ATLANTA
YRI	SEDOT ASP PAITN Arrival	CHICAGO
YRI	POLTY YSO YXU J545 DJB J83 APE Cince Arrival	CINCINNATI
YRI	POLTY YSO YXU J545 DJB J29 PXV J131 LIT BYP	DALLAS/FT WORTH
YRI	YXI YVV ECK POLAR Polar Arrival	DETROIT
YRI	POLTY YSO YXU J545 DJB J29 PXV J131 LIT J180 DAS Daisetta Arrival	HOUSTON
YRI	BLAKK Catog Arrival	MONTREAL/MIRABEL
YRI	MUROP OMBRE Ombre Arrival	MONTREAL/TRUDEAU
YRI	YXI YEE ECK GIJ RBS Vandalia Arrival	ST. LOUIS
YRI	YMX J546 V300 YSO V37	TORONTO

VIA ZQA

Inland Navigation Facility/Fix	Non-Common Portion	Destination
ZQA	BR22V DEKAL	FT LAUDERDALE
ZQA	BR49V FOWEE Fowee Arrival	MIAMI
ZQA	BR54V	PALM BEACH

RNAV Routing Pitch and Catch Points

The purpose of this section of the Special High Altitude Routes is to present user routing options for flight within the initial HAR Phase I expansion airspace. Users are able to fly user-preferred routes, referred to as non-restrictive routing (NRR), between specific fixes described by **pitch** (entry into) and **catch** (exit out of) fixes in the HAR airspace. Pitch points indicate an end of departure procedures, preferred IFR routings, or other established routing programs where a flight can begin a segment of NRR. The catch point indicates where a flight ends a segment of NRR and joins published arrival procedures, preferred IFR routing, or other established routing programs.

The HAR Phase I expansion airspace is defined as that airspace at and above FL 350 in fourteen of the western and southern Air Route Traffic Control Centers (ARTCCs). The airspace includes Minneapolis (ZMP), Chicago (ZAU), Kansas City (ZKC), Denver (ZDV), Salt Lake City (ZLC), Oakland (ZOA), Seattle Centers (ZSE), Los Angeles (ZLA), Albuquerque (ZAB), Fort Worth (ZFW), Memphis (ZME), and Houston (ZHU). Jacksonville (ZJX) and Miami (ZMA) are included for east-west routes only.

To develop a flight plan, select pitch and catch points based upon your desired route across the Phase I airspace. Filing requirements to pitch points, and from catch points, remain unchanged from current procedures. For the portion of the route between the pitch and catch points, non-restrictive routing is permitted.

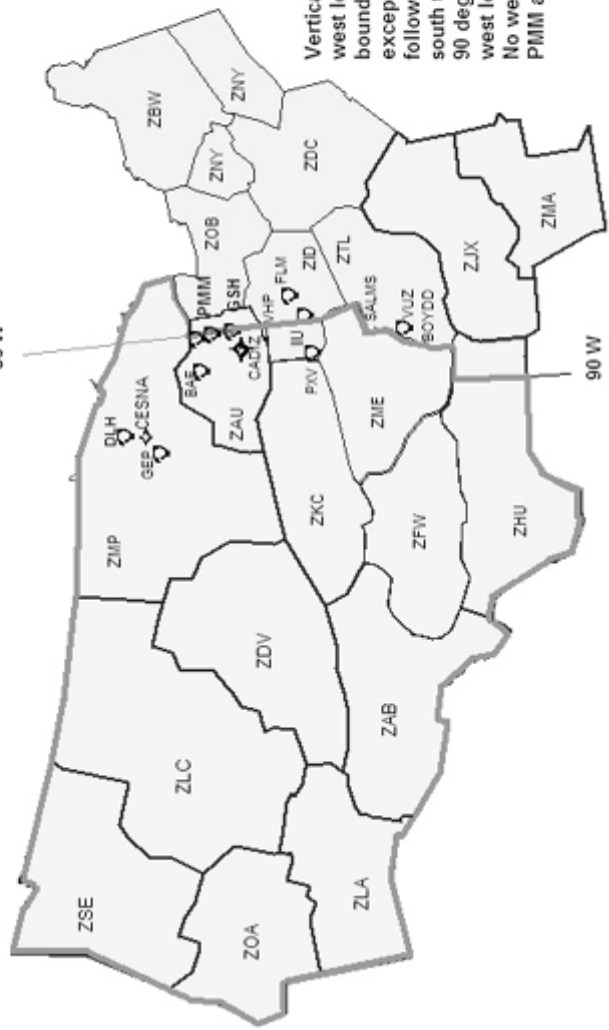
Where pitch points for a specific airport are not identified, aircraft should file an appropriate departure procedure (DP), or any other user preferred routing prior to the NRR portion of their routing. Where catch points for a specific airport are not identified aircraft should file, after the NRR portion of their routing, an appropriate arrival procedure or other user preferred routing to their destination.

Additionally, information concerning the location and schedule of Special Use Airspace (SUA) and Air Traffic Control Assigned Airspace (ATCAA) can be found on the Web Site: http://sua.faa.gov/sua/Welcome.do. ATCAA refers to airspace in the high altitude structure supporting military and other special operations. Users are encouraged to file around these areas when they are scheduled to be active, thereby avoiding unplanned reroutes around them.

In conjunction with the HAR program RNAV routes have been established to provide for a systematic flow of air traffic in specific portions of the enroute flight environment. The designator for these RNAV routes begin with the letter Q, for example, Q-501. Where those routes aid in the efficient orderly management of air traffic they will be published as preferred IFR routes.

High Altitude Redesign (HAR) Phase One Expansion Airspace

Except as noted, flights entering HAR expansion airspace may pitch at the airspace boundary, at the vertical pitch line, or at the fixes listed on the following page.



Vertical Pitch Line: 86 degrees west longitude from the ZMP/ZAU boundary to the ZME/ZID boundary, except between PMM and GSH, then following the ZME east boundary south to the ZHU boundary. Then west to 90 degrees west longitude, the 90 degrees west longitude to the ZHU southern boundary. No westbound traffic between PMM and GSH.

HAR Special High Altitude Pitch (entry) Points for Nonrestrictive Routing for Airports Located Outside HAR Phase I Expansion Airspace

Westbound traffic originating outside of HAR airspace entering ZMP, ZAU, ZKC and ZME can begin non–restrictive routing over any of the following pitch points (listed from north to south):

DLH, CESNA, GEP, BAE, MKG, GRR, PMM, GSH, CADIZ, FWA, VHP, FLM, IIU, PXV, SGF, RZC, BNA, SALMS, VUZ, BOYDD, MIE.

Traffic originating outside of HAR airspace may also begin Nonrestrictive Routing upon crossing the pitch line depicted on the associated graphic.

HAR Special High Altitude Pitch Points for Airports Located Within (below) HAR Phase I Expansion Airspace

This section lists pitch points for airports within the HAR Phase I expansion airspace.

Albuquerque	ABQ, GUP, HANOS or ZUN
Austin	ABI, FUZ, JCT, MQP, NAVYS, SJT or TNV
Boca Raton, FL	TBIRD KPASA Q118 LENIE or TBIRD KPASA Q116 CEEYA or TBIRD KPASA Q110 FEONA or TBIRD SMELZ Q106 BULZI or TBIRD SMELZ Q106 GADAY
Burbank includes Santa Monica and Van Nuys	GMN, MARKS or DAG LAS or HEC EED or PMD BLH
Chicago Terminal Area	IOW, PLL275065, MZV or BAE
Dallas/Fort Worth Terminal Area	ABI, LBB, GTH, CDS, MRMAC, IRW, TUL, MLC, TXK ELD, SWB or Aircraft destined the Chicago terminal area Except MDW EAKER MIDEE BDF BRADFORD–STAR or MLC J105 SGF BDF BRADFORD–STAR
Denver Terminal Area	PUB, DVC, DBL, RLG, EKR, LAR, MBW, CYS, BFF, HANKI, NATTI, ASHBY, BELKE, CABET, WEEDS, OR BINKE
Fort Lauderdale (or) Fort Lauderdale Executive	THNDR KPASA Q118 LENIE or THNDR KPASA Q116 CEEYA or THNDR KPASA Q110 FEONA or THNDR SMELZ Q106 GADAY or THNDR SMELZ Q106 BULZI
Houston Bush	LIT, ELD, MLC, JCT or Aircraft destined Atlanta Terminal Area LCH Q24 PAYTN HONIE–RNAV STAR or Aircraft joining J37 to the northeast, GUSTI SID GUSTI Q22 CATLN or Aircraft joining J42 to the northeast, EL DORADO SID ELD Q32 J42

Houston Hobby	LIT, ELD, MLC, JCT, or Aircraft joining J42 to the northeast, EL DORADO SID ELD Q32 J42
Jacksonville, FL	TAY
Kansas City Terminal Area	TIFTO, CATTS or KENTN
Los Angeles, includes Ontario	GMN, RZS or DAG LAS or TRM EED or TRM PKE
Las Vegas	DOBNE, MOSBI, NICLE, TRALR or ZELOT
Long Beach includes Orange County	GMN SNS, EHF, LANDO or TRM PKE or TRM EED
Memphis	BNA, HAAWK, SALMS or SQS
Miami Terminal Area	WINCO KPASA Q118 LENIE or WINCO KPASA Q116 CEEYA or WINCO KPASA Q110 FEONA or WINCO SMELZ Q106 GADAY or WINCO SMELZ Q106 BULZI
Milwaukee	GREAS
Minneapolis Terminal Area*	ONL, ABR, FAR, OBH, OVR, FOD
New Orleans Terminal Area	AEX, MEI, SQS, KAPLN
Orlando Terminal Area	WEBBS BRUTS Q118 LENIE or WEBBS GULFR Q116 CEEYA or WEBBS BULZI Q106 GADAY or WEBBS FEONA or WEBBS BULZI
Palm Beach, FL	TBIRD KPASA Q118 LENIE or TBIRD KPASA Q116 CEEYA or TBIRD KPASA Q110 FEONA or TBIRD SMELZ Q106 BULZI or TBIRD SMELZ Q106 GADAY
Palm Springs	TRM JOTNU BLD or TRM EED or TRM PKE
Phoenix	CHILY, CIE, CULTS, RSK, DOVEE, GCN, MESSI, SJN, DRYHT or MOHAK
Portland, OR	PDT, TIMEE

Salt Lake City	HVE, DTA, MLF, BCE, OAL, MTU, BVL, OCS, TWF, DBS, BPI or TCH J56 CHE or TCH J173 EKR
Saint Louis	VIH, MAP, MYERZ, MCM or HLV MCI
San Antonio Terminal Area	FUZ, SJT, MQP, ABI or Aircraft North of LFK, LFK or Aircraft South of HUB, ELA or Aircraft South of LFK and North of HUB LCH
San Diego	TRM EED or TRM PKE or TRM JOTNU BLD
San Francisco Bay Area	GALLI, INSLO, HAROL JSICA
Oakland	GALLI, INSLO, HAROL JSICA
San Jose	GALLI or INSLO
Seattle	BLUIT
Southwest Florida Airports (RSW/FMY)	JOCKS KPASA Q118 LENIE or JOCKS KPASA Q116 CEEYA or JOCKS KPASA Q110 FEONA or JOCKS SMELZ Q106 GADAY or JOCKS SMELZ Q106 BULZI
Tampa Terminal Area	FEONA, BULZI or BRUTS Q118 LENIE or GULFR Q116 CEEYA or BULZI Q106 GADAY

*MSP area departures with destinations east of 93 degrees west longitude via preferred IFR routing.

Catch Points for Airports Located Outside HAR Phase I Expansion Airspace

This section lists exit points for aircraft destined to specific destinations which are outside the HAR Phase I airspace.

Atlanta Terminal Area	Aircraft through ZME airspace from ZKC airspace east of FAM, Pless Q19 BNA or Aircraft through ZME airspace from ZKC airspace west of FAM, ARG Q26 DEVAC or MEM or Aircraft through ZME airspace from ZID airspace west of a line from VHP to BWG, BNA or Aircraft through ZME airspace from ZID airspace east of a line from VHP to BWG, BWG or Aircraft through ZME airspace from ZFW airspace, MEM or MEI HONIE (RNAV)–STAR or PATYN HONIE (RNAV)–STAR

Baltimore–Washington*	GIJ, GEP, FLM, IIU, BAE, VHP, WHETT, BNA or VUZ
Boston*	GEP, CRL, ECK, IIU, BNA or VUZ
Buffalo*	GEP, CRL
Hartford Bradley*	GEP, CRL
Canton–Akron*	GIJ, VHP, GEP
Charlotte	BNA, VUZ
Cincinnati Terminal Area	BNA, PXV or Aircraft north of SLC, JOT or Aircraft over or south of SLC, ENL or SLC or SFO departures, ENL, JOT
Cleveland Terminal Area*	OBK
Detroit Terminal Area	BAE MKG POLAR–STAR or VHP FWA MIZAR–STAR
Detroit Young	VHP FWA or LAN SPRTN–STAR
Indianapolis Terminal Area	BIB, SPI, JOT
Louisville	ENL, MEM
Newark*	GEP, VHP, FLM, IIU, BNA, VUZ or IOW GIJ J554 CRL J584 SLT FQM
New York Kennedy*	GEP, VHP, FLM, IIU, BNA, VUZ or DBQ J94 PMM J70 LVZ LENDY–STAR
New York LaGuardia*	GIJ, GEP, VHP, BAE, FLM, IIU, BNA, VUZ
Philadelphia Terminal Area*	GIJ, GEP, VHP, BAE, WHETT, BNA, VUZ
Pittsburgh Terminal Area*	VHP, GIJ, BAE, GEP
Pontiac	LFD, LAN, VHP, FWA, GEP
Providence	JHW, HEMDI, CESNA, GEP, GRB, TVC, ASP, VHP, IIU, BNA, VUZ
Raleigh–Durham	FLM, IIU, BNA, VUZ
Toronto Terminal Area	ECK, SVM, SSM, GEP
Teterboro*	GEP, VHP, CRL, BNA, VUZ
Washington Dulles/National*	GIJ, GEP, FLM, IIU, BAE, VHP, WHETT, BNA, VUZ
White Plains*	GEP, VHP, CRL, FLM, IIU, BNA, VUZ
Willow Run*	LAN, LFD, VHP, FWA, GEP

*Eastbound aircraft over flying ZMP center airspace entering Toronto center airspace, file direct SSM or via J63, J522, Q505, Q504, Q502, Q501
or
Entering ZAU or ZOB airspace from north of DPR J16 MCW, GEP
or
Entering ZAU or ZOB airspace from or south of DPR J16 MCW, CRL.

Catch Points for Airports Located Within (below) HAR Phase I Expansion Airspace

This section lists exit points for aircraft destined to airports which are below HAR Phase I airspace.

Albuquerque Terminal Area	CURLY CURLY–STAR or ESPAN FRIHO–STAR or LAVAN LAVAN–STAR or FTI FRIHO–STAR or MIERA MIERA–STAR
Austin Terminal Area	Aircraft west of a north–south line at LFK, BLEWE or Aircraft east of a north–south line at LFK,IDU or LLO
Boca Raton, FL	CEW DEFUN Q112 INPIN SHDAY (RNAV)–STAR Aircraft through ZHU remain south of ZME and ZTL airspace or DEFUN Q112 INPIN SHDAY (RNAV)–STAR Aircraft through ZHU remain south of ZME and ZTL airspace or SZW INPIN SHDAY (RNAV)–STAR
Chicago Midway	CVA MOTIF–STAR or PIA MOTIF–STAR or DBQ CVA MOTIF–STAR or LMN MOTIF–STAR
Chicago O'Hare Terminal Area	GEP DLL MSN JVL JANESVILLE–STAR or TVC PULLMAN–STAR or FOD DBQ JVL JANESVILLE–STAR or MCW JANESVILLE–STAR or GCK IRK BRADFORD–STAR
Dallas/Fort Worth Terminal Area	IRW, LOSZY, FSM, LIT, SQS, MLU, AEX, JUMBO, TQA, TURKI, HEATR Aircraft through ZME airspace from north and west of PXV, RZC, Q23 FSM or Aircraft through ZME airspace from east of PXV, PXV Q25 MEEOW or Aircraft through ZME airspace from J6 down to, but not including J52, LIT, SQS or Aircraft through ZME airspace from J52 and south of J52, SQS

Denver Terminal Area	OATHE DANDD–STAR or HGO QUAIL–STAR or LOPEC–STAR or ALS LARKS–STAR or HBU POWDR–STAR or EKR TOMSN–STAR or CHE TOMSN–STAR or BFF LANDR–STAR or LBF SAYGE–STAR or HCT SAYGE–STAR or RSK LARKS–STAR or LAA QUAIL–STAR or GCK J154 RYLIE DANDD–STAR or OCS J154 ALPOE RAMMS–STAR or YANKI J114 SNY LANDR–STAR or Aircraft filed BIL or east, MBW RAMMS–STAR
Ft Lauderdale or Ft Lauderdale Executive	CEW DEFUN Q104 PIE SWAGS (RNAV)–STAR Aircraft through ZHU airspace remain south ZME and ZTL airspace or SZW HEVVN Q104 PIE SWAGS (RNAV)–STAR
Houston Bush	CRP, CVE, LLO, LUKIY, SAT or Aircraft south and east of LLA, JEPEG or MISLE Q40 AEX or Aircraft north and east of SJI, SJI or Aircraft east of PXV, PXV Q31 DHART SWB or Aircraft north and west of PXV, PROWL Q33 DHART SWB
Houston Hobby	CRP, ELLVR, SAT, SWB or Aircraft south and east of GIRLY, KCEEE or Aircraft north and east of SJI, SJI or BESOM Q38 ROKIT ROKIT–STAR or Aircraft east of PXV, PXV Q29 HARES SWB or Aircraft north and west of PXV, PROWL Q33 DHART SWB
Jacksonville	GADAY ZOOSS TAY Aircraft through ZHU airspace remain south of ZME and ZTL airspace or ZOOSS TAY

John Wayne–Orange County	HEC, PGS, BLD or Aircraft south of TBC from ZAB airspace, HIPPI
Kansas City Terminal Area	LMN BRAYMER–STAR or PWE ROBINSON–STAR or EMP JHAWK–STAR
Las Vegas	DILCO, LIDAT, IGM or Aircraft over PGA or north of PGA KSINO or Aircraft south of PGA PGS LYNSY
Los Angeles Terminal Area	Aircraft North of TBC, HEC, PGS or Aircraft South of TBC from ZAB airspace, HIPPI, MESSI
Miami Terminal Area	CEW DEFUN Q104 CYY DEEDS (RNAV)–STAR Aircraft through ZHU airspace remain south ZME and ZTL airspace or SZW HEVVN Q104 CYY DEEDS (RNAV)–STAR
Minneapolis Terminal Area	Aircraft from north, west, south, FAR GOPHER–STAR or RWF SKETR–STAR or ALO KASPR–STAR or BRD GOPHER–STAR or BAE EAU CLAIRE–STAR or FOD TWOLF–STAR
Memphis Terminal Area	ARG, BWG, FSM, PXV, LIT, RZC, SQS, VUZ, BNA, GQO, ELD
Naples, FL	CEW DEFUN Q104 PLYER PIKKR (RNAV)–STAR Aircraft through ZHU AIRSPACE remain south of ZME and ZTL airspace or SZW HEVVN Q104 PLYER PIKKR (RNAV)–STAR
Nashville	CCT, GHM, GUITR, TINGS, VOLLS
New Orleans Terminal Area	BLUEZ, GPT, LCH, MCB, TBD, FATSO
Oakland	ILA or KATTS PAMMY or Aircraft over or south of a line ILC J16 DVC REANA KATTS PAMMY or Aircraft from north of ILC, JOPER PAMMY or KATTS PAMMY or Aircraft over or south of ILC, REANA KATTS PAMMY
Orlando Terminal Area	GADAY Q108 CLAWZ LEESE–STAR Aircraft through ZHU airspace remain south of ZME/ZTL airspace or OTK LEESE–STAR

Palm Beach, FL	CEW DEFUN Q112 INPIN GULLO (RNAV)–STAR Aircraft through ZHU airspace remain south of ZME and ZTL airspace or SZW INPIN GULLO (RNAV)–STAR
Phoenix	CORKR DRK or Aircraft from ZDV airspace, GUP or Aircraft from ZAB airspace, ZUN, MOHAK, SSO or VYLLA TUS
Phoenix Satellites	FLG, SSO, MOHAK or VYLLA, TUS
Portland, OR Terminal Area	ARNIT BONVL–STAR or LARNO BONVL–STAR or MOXEE MOXEE–STAR
St. Louis Terminal Area	SGF TRAKE–STAR or BUM TRAKE–STAR or ANX TRAKE–STAR or LMN IRK RIVRS–STAR or RBS VANDALIA–STAR
Salt Lake City Terminal Area	JNC J12 HELPR SPANE–STAR or EKR MTU SPANE–STAR or BCE DTA–TCH or MLF DTA–TCH or BVL BONNEVILLE–STAR or BYI BEARR–STAR or PIH BEARR–STAR or DBS BRIGHAM CITY–STAR or JAC BRIGHAM CITY–STAR or BPI BRIGHAM CITY–STAR or OCS BRIGHAM CITY–STAR
San Diego Terminal Area	EED, LAX, GBN
Santa Ana	HEC, PGS, BLD, HIPPI
San Antonio Terminal Area	IDU, CSI, JCT, LLO, CRP, LRD or West of a north–south line at LFK, BLEWE or East of a north–south line at LFK, IDU

San Francisco	FMG GOLDEN GATE–STAR or MVA MODESTO–STAR or ENI GOLDEN GATE–STAR or OAL MODESTO–STAR or South of a line ILC to DVC, REANA KATTS OAL MODESTO–STAR
San Jose	FMG HYP EL NIDO–STAR or OAL HYP EL NIDO–STAR or ENI GOLDEN GATE–STAR or South of a line ILC to DVC, REANA KATTS KICHI CANDA EL NIDO–STAR
Seattle Terminal Area	Aircraft from northeast, southeast, south, TEMPL GLASR–STAR or SUNED CHINS–STAR or BTG OLMYPIA–STAR
Southwest Florida Airports RSW and FMY	CEW DEFUN Q104 SWABE JOSFF–STAR Aircraft through ZHU airspace remain south of ZME and ZTL airspace or SZW HEVVN Q104 SWABE JOSFF–STAR
Tampa Terminal Area	CEW DEFUN Q104 HEVVN DARBS–STAR Aircraft through ZHU airspace remain south of ZME and ZTL airspace or SZW DARBS–STAR
Tucson	DRK PXR or MOHAK GBN

VISUAL FLIGHT RULES (VFR) WAYPOINTS

VFR Waypoint names consist of five letters beginning with ''VP''. Stand–alone VFR Waypoints are portrayed on VFR Charts using the same four–point star symbol currently used for Instrument Flight Rules (IFR) Waypoints.

VFR Waypoints collocated with Visual Checkpoints (Visual Reporting Points) are portrayed with a Visual Check Point flag. The VFR Waypoint name is shown in parentheses adjacent to the Visual Check Point name.

VFR Waypoint names are not intended to be pronounceable and shall not be used in ATC communications.

CAUTION: GPS accuracy necessitates extra vigilance for other aircraft when navigating near any fix retrieved from a GPS database.

BALTIMORE–WASHINGTON TERMINAL AREA CHART/FLYWAY CHART

WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPAXI	_____	N38°34.57′/W076°20.38′
VPONX	_____	N39°06.65′/W076°55.92′
VPOOP	_____	N38°56.32′/W076°36.90′

BOSTON HELICOPTER CHART

VPBAY	_____	N42°16.17′/W070°49.48′
VPBLT	_____	N42°19.67′/W070°53.40′
VPCGS	_____	N42°22.08′/W071°03.13′
VPEVS	_____	N42°23.52′/W071°04.10′
VPFEN	_____	N42°12.58′/W071°08.88′
VPFRE	_____	N42°25.03′/W071°12.32′
VPGVL	_____	N42°21.88′/W070°52.18′
VPHAM	_____	N42°30.13′/W071°07.15′
VPPIK	_____	N42°20.37′/W071°15.93′
VPQUA	_____	N42°12.10′/W071°04.78′
VPQUB	_____	N42°12.60′/W070°59.83′
VPSPF	_____	N42°24.20′/W071°09.47′
VPTOB	_____	N42°31.42′/W070°59.82′
VPWAN	_____	N42°36.88′/W071°19.45′

BOSTON TERMINAL AREA CHART

VPCOH	Cohasset	N42°13.58′/W070°48.94′
VPCUT	Cuttyhunk Harbor	N41°25.50′/W070°55.03′
VPFRA	Framingham Shopping Center	N42°18.16′/W071°23.65′
VPHOL	Woods Hole	N41°31.06′/W070°40.60′
VPHUL	Hull	N42°18.20′/W070°55.30′
VPLPT	Nantucket Great Point	N41°23.41′/W070°02.78′
VPNED	Needham Towers	N42°18.51′/W071°14.64′
VPPEA	Peabody Shopping Center	N42°32.52′/W070°56.69′
VPROC	Rockingham Race Track	N42°46.29′/W071°13.57′
VPSCI	Scituate	N42°11.89′/W070°43.69′
VPTPT	Nantucket Third Point	N41°18.51′/W070°03.37′
VPTUC	Tuckernuck	N41°18.31′/W070°15.43′
VPWAK	Wakefield	N42°30.72′/W071°05.24′
VPWAN	Wang Towers	N42°36.88′/W071°19.45′

CHARLOTTE SECTIONAL CHART

VPATO	_____	N34°37.37′/W076°31.47′
VPAVA	_____	N34°57.00′/W077°16.50′
VPBFE	_____	N32°16.38′/W080°47.50′
VPBRA	_____	N36°13.75′/W076°08.08′
VPGCE	_____	N36°03.90′/W076°36.42′
VPGHI	_____	N35°15.30′/W075°31.25′
VPGIO	_____	N35°32.50′/W076°37.33′
VPKJU	_____	N35°26.58′/W076°10.22′
VPLMN	_____	N34°55.43′/W077°46.42′
VPMAB	_____	N34°42.20′/W077°03.50′
VPNPO	ISLE OF PALMS	N32°47.78′/W079°46.45′
VPOKY	_____	N35°06.53′/W075°59.17′
VPREP	_____	N32°33.98′/W080°21.82′
VPRRS	_____	N33°25.45′/W079°07.60′
VPUMO	_____	N35°35.63′/W075°28.08′
VPWZO	_____	N36°00.87′/W075°40.07′
VPZIE	_____	N32°01.62′/W080°53.42′

CHICAGO SECTIONAL CHART

WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPCOH	_____	N31°49.35′/W081°51.07′

DENVER TERMINAL AREA CHART/FLYWAY CHART

VPBEN	_____	N39°44.28′/W104°26.00′
VPFTG	_____	N39°44.35′/W104°32.75′
VPNIC	NORTH INTERCHANGE	N39°58.90′/W104°59.27′

HOUSTON TERMINAL AREA CHART/FLYWAY CHART

WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPBWY	_____	N29°46.25′/W095°09.24′
VPDTN	_____	N29°46.59′/W095°22.01′
VPGLA	_____	N30°08.32′/W095°06.62′
VPGLB	_____	N30°07.80′/W094°55.70′
VPKTY	_____	N29°47.05′/W095°44.92′
VPPLN	_____	N30°08.80′/W095°50.42′
VPRSN	_____	N29°30.00′/W095°41.00′
VPSND	_____	N29°23.13′/W095°28.86′
VPSNT	_____	N29°49.29′/W094°53.94′
VPTNE	_____	N29°47.48′/W095°03.34′
VPTNW	_____	N29°47.06′/W095°33.81′
VPTRK	_____	N29°24.06′/W095°10.44′

JACKSONVILLE SECTIONAL CHART

VPAFI	_____	N31°49.35′/W081°51.07′
VPAFY	_____	N30°07.00′/W081°21.33′
VPBEC	_____	N29°46.25′/W081°15.10′
VPCJA	_____	N29°30.00′/W081°06.00′
VPCKY	_____	N28°46.50′/W082°34.00′
VPCNY	_____	N28°30.00′/W080°45.00′
VPDAD	DADE CITY	N28°22.57′/W082°11.25′
VPDAR	_____	N31°22.38′/W081°24.13′
VPDFI	_____	N29°00.17′/W081°20.85′
VPDUT	_____	N27°37.70′/W082°09.10′
VPEAR	CLEARWATER BEACH	N27°58.67′/W082°49.83′
VPEGV	_____	N29°39.97′/W081°24.87′
VPFFU	_____	N28°57.08′/W081°00.33′
VPGPE	ST PETE BEACH	N27°43.50′/W082°44.67′
VPHAA	_____	N30°04.02′/W083°40.02′
VPHUC	_____	N28°19.87′/W082°43.77′
VPIWA	MIDWAY	N31°48.33′/W081°25.85′
VPJMY	_____	N29°26.92′/W081°18.27′
VPKER	LAKE PARKER	N28°04.00′/W081°56.00′
VPLEV	_____	N28°48.00′/W080°52.00′
VPLJA	_____	N29°00.00′/W080°51.00′
VPMAI	_____	N30°50.02′/W084°56.63′
VPTLH	_____	N30°32.70′/W083°52.22′
VPXZY	_____	N29°35.00′/W083°10.00′
VPYIW	_____	N30°42.28′/W081°27.25′
VPZIE	_____	N32°01.62′/W080°53.42′

KANSAS CITY SECTIONAL CHART

VPAGO	_____	N37°50.33′/W090°29.03′
VPBEK	_____	N37°15.07′/W092°30.67′
VPDEN	_____	N37°46.75′/W092°19.20′
VPENE	_____	N37°44.75′/W091°55.78′
VPESS	_____	N36°59.48′/W091°00.88′
VPFME	_____	N37°41.00′/W092°38.33′
VPGXY	_____	N37°15.50′/W091°40.17′
VPMBE	_____	N37°11.08′/W090°27.92′
VPMKE	_____	N37°24.47′/W092°40.00′
VPROV	_____	N38°01.72′/W091°12.81′
VPUTT	_____	N37°52.05′/W092°01.20′

WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPWOC	_____	N37°18.03′/W092°18.63′
VPWRO	_____	N37°39.12′/W091°45.68′
VPXIZ	_____	N37°26.60′/W092°05.42′

KANSAS CITY TERMINAL AREA CHART

VPATN	ATCHISON	N39°33.62′/W095°07.65′
VPBGS	BLUE SPRINGS	N39°01.82′/W094°16.32′
VPBSP	BONNER SPRINGS	N39°03.78′/W094°53.10′
VPCHB	CHOUTEAU BRIDGE	N39°08.77′/W094°32.03′
VPDSO	DE SOTO	N38°58.68′/W094°58.48′
VPESG	EXCELSIOR SPRINGS	N39°20.68′/W094°13.77′
VPGTB	GARRETSBURG	N39°40.92′/W094°41.45′
VPLAT	LATHROP WATER TANK	N39°32.87′/W094°20.00′
VPLEN	LENEXA	N38°57.77′/W094°43.68′
VPLVL	LONGVIEW LAKE	N38°54.63′/W094°28.28′
VPMCL	MC LOUTH	N39°11.65′/W095°12.50′
VPNHA	NASHUA	N39°17.83′/W094°34.80′
VPSCX	SPORTS COMPLEX	N39°03.00′/W094°29.02′
VPSKR	SUGAR CREEK REFINERY	N39°07.00′/W094°27.02′
VPSPK	SWOPE PARK	N39°00.47′/W094°31.93′
VPTSK	TWIN STACKS	N39°09.05′/W094°38.22′
VPWOF	WORLDS OF FUN	N39°10.42′/W094°29.12′

KLAMATH FALLS SECTIONAL CHART

VPORO	_____	N43°57.38′/W123°02.22′

LOS ANGELES HELICOPTER CHART

VPANA	_____	N33°44.43′/W117°50.03′
VPART	MAGNOLIA	N33°51.45′/W117°58.92′
VPAUT	HWY 91 & 55	N33°50.63′/W117°49.57′
VPBOB	_____	N33°59.60′/W117°21.45′
VPCAR	_____	N33°49.90′/W118°17.23′
VPCNG	CONEJO GRADE US HWY 101	N34°12.54′/W118°59.61′
VPCOR	_____	N33°52.90′/W117°32.95′
VPCRX	_____	N34°01.40′/W117°44.88′
VPCSU	CSU CHANNEL ISLANDS	N34°09.76′/W119°02.53′
VPDOW	_____	N33°56.47′/W118°05.80′
VPELA	_____	N34°00.98′/W118°10.35′
VPETY	_____	N33°38.70′/W117°44.12′
VPFCB	_____	N34°02.03′/W118°01.63′
VPFPL	OXNARD FINANCIAL PLAZA	N34°13.71′/W119°10.39′
VPGOL	_____	N34°09.33′/W118°17.37′
VPIMP	_____	N33°55.85′/W118°16.85′
VPKAT	_____	N33°48.23′/W117°54.22′
VPKEL	_____	N34°03.92′/W117°48.40′
VPLAC	_____	N34°03.75′/W118°14.93′
VPLLU	_____	N34°03.85′/W117°17.82′
VPLQM	QUEEN MARY	N33°45.17′/W118°11.37′
VPLRT	SANTA ANITA RACE TRACK	N34°08.45′/W118°02.65′
VPLVT	VINCENT THOMAS BRIDGE	N33°44.97′/W118°16.32′
VPMDR	_____	N33°59.27′/W118°23.97′
VPNEW	NEWHALL PASS	N34°20.18′/W118°30.72′
VPNUY	_____	N34°09.63′/W118°28.18′
VPPCH	_____	N33°28.07′/W117°40.32′
VPPKC	_____	N34°03.32′/W118°12.83′
VPPOR	_____	N34°00.10′/W117°50.12′
VPRRT	_____	N33°59.37′/W118°16.83′
VPSEP	_____	N34°05.80′/W118°28.63′
VPSFR	_____	N34°17.45′/W118°28.07′
VPSTC	SATICOY BRIDGE	N34°16.62′/W119°08.34′
VPSTK		N34°13.97′/W118°24.60′

LOS ANGELES SECTIONAL CHART

WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPCNG	CONEJO GRADE US HWY 101	N34°12.54′/W118°59.61′
VPCSU	CSU CHANNEL ISLANDS	N34°09.76′/W119°02.53′
VPFPL	OXNARD FINANCIAL PLAZA	N34°13.71′/W119°10.39′
VPSTC	SATICOY BRIDGE	N34°16.62′/W119°08.34′

LOS ANGELES TERMINAL AREA CHART/FLYWAY CHART

VPCNG	CONEJO GRADE US HWY 101	N34°12.54′/W118°59.61′
VPCSU	CSU CHANNEL ISLANDS	N34°09.76′/W119°02.53′
VPGTY	GETTY CENTER	N34°04.84′/W118°28.66′
VPLBP	BANNING PASS	N33°56.05′/W116°59.63′
VPLCC	CHAFFEY COLLEGE	N34°08.87′/W117°34.33′
VPLCP	CAJON PASS	N34°18.07′/W117°27.68′
VPLDL	DISNEYLAND	N33°48.72′/W117°55.13′
VPLDP	DANA POINT	N33°27.62′/W117°42.87′
VPLDS	DODGER STADIUM	N34°04.42′/W118°14.42′
VPLFX	91/605 INTERCHANGE	N33°52.38′/W118°06.08′
VPLGP	GRIFFITH PARK OBSERVATORY	N34°07.10′/W118°18.02′
VPLHF	110/405 FWYS	N33°51.42′/W118°17.10′
VPLHP	HUNTINGTON PIER	N33°39.32′/W118°00.25′
VPLKH	KING HARBOR	N33°50.75′/W118°23.88′
VPLLC	L.A. COLISEUM	N34°00.83′/W118°17.27′
VPLLM	LAKE MATHEWS	N33°50.58′/W117°26.85′
VPLMM	MAGIC MOUNTAIN	N34°26.20′/W118°36.28′
VPLMS	MILE SQUARE PARK	N33°43.40′/W117°56.77′
VPLPD	PRADO DAM	N33°53.40′/W117°38.48′
VPLPP	PACIFIC PALISADES	N34°02.13′/W118°32.15′
VPLQM	QUEEN MARY	N33°45.17′/W118°11.37′
VPLRB	ROSE BOWL	N34°09.67′/W118°10.05′
VPLRT	SANTA ANITA RACE TRACK	N34°08.45′/W118°02.65′
VPLSA	SANTA ANA CANYON	N33°52.03′/W117°42.68′
VPLSB	SANTA FE FLOOD BASIN	N34°07.72′/W117°57.30′
VPLSC	STATE COLLEGE	N33°52.97′/W117°53.13′
VPLSF	SAN FERNANDO RESERVOIR	N34°17.87′/W118°29.00′
VPLSP	SIGNAL PEAK	N33°36.33′/W117°48.63′
VPLSR	HAWTHORNE & 405 FREEWAY	N33°53.07′/W118°21.13′
VPLSS	SANTA SUSANA PASS	N34°16.00′/W118°38.43′
VPLTW	TUJUNGA WASH & FOOTHILL	N34°16.40′/W118°20.30′
VPLVT	VINCENT THOMAS BRIDGE	N33°44.97′/W118°16.32′
VPLWT	WATER TANK	N34°10.82′/W118°46.27′
VPNEW	NEWHALL PASS	N34°20.18′/W118°30.72′
VPSTC	SATICOY BRIDGE	N34°16.62′/W119°08.34′

MIAMI SECTIONAL CHART

VPACH	HOLLYWOOD BEACH	N26°00.92′/W080°06.93′
VPBOV	_____	N27°57.00′/W080°46.75′
VPCLE	_____	N26°27.07′/W082°00.88′
VPCTE	_____	N26°09.28′/W081°20.70′
VPDAD	DADE CITY	N28°22.57′/W082°11.25′
VPDUT	_____	N27°37.70′/W082°09.10′
VPDZE	_____	N27°19.00′/W080°44.17′
VPEAR	CLEARWATER BEACH	N27°58.67′/W082°49.83′
VPEDY	ANDYTOWN TOLLGATE	N26°08.78′/W080°28.00′
VPFAH	_____	N26°25.40′/W081°29.67′
VPGPE	ST PETE BEACH	N27°43.50′/W082°44.67′
VPHRO	_____	N27°05.97′/W082°12.20′
VPHUC	_____	N28°19.87′/W082°43.77′
VPIBR	_____	N27°12.47′/W081°40.22′
VPKER	LAKE PARKER	N28°04.00′/W081°56.00′
VPKOE	_____	N24°40.08′/W081°20.55′
VPLYY	_____	N24°49.07′/W080°49.17′
VPMBO	GULFSTREAM PARK	N25°58.57′/W080°08.17′
VPOBA	PUMPING STATION	N26°28.30′/W080°26.75′
VPRBI	_____	N25°50.67′/W080°55.18′
VPRNL	RANGER STATION	N25°22.92′/W080°36.58′
VPWMO	_____	N27°03.00′/W080°35.00′

MIAMI TERMINAL AREA CHART/FLYWAY CHART

WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPACH	HOLLYWOOD BEACH	N26°00.92′/W080°06.93′
VPEDY	ANDYTOWN TOLLGATE	N26°08.78′/W080°28.00′
VPMBO	GULFSTREAM PARK	N25°58.57′W080°08.17′
VPOBA	PUMPING STATION	N26°28.30′/W080°26.75′
VPRBI	_____	N25°50.67′/W080°55.18′
VPRNL	RANGER STATION	N25°22.92′/W080°36.58′

NEW ORLEANS SECTIONAL CHART

VPGPT	_____	N30°25.95′/W089°05.62′
VPLIP	PHILLIPS INLET	N30°16.23′/W085°59.25′
VPMAI	_____	N30°50.02′/W084°56.63′
VPMOB	_____	N30°23.00′/W088°31.72′
VPRAM	_____	N30°18.95′/W089°35.88′
VPRER	_____	N30°13.87′/W085°20.67′
VPRIV	_____	N30°54.85′/W087°57.82′
VPSAW	_____	N30°49.65′/W089°07.42′
VPTHR	_____	N30°19.93′/W087°08.50′

NEW YORK HELICOPTER CHART

VPJAY	_____	N40°59.00′/W073°07.00′
VPLYD	_____	N40°57.37′/W073°29.59′
VPROK	_____	N40°52.70′/W073°44.24′

PHOENIX TERMINAL AREA CHART/FLYWAY CHART

VPALL	ALLENVILLE	N33°20.97′/W112°35.20′
VPAQU	AQUEDUCT PUMPING STATION	N33°40.05′/W112°41.38′
VPARM	ARROWHEAD MALL	N33°38.52′/W112°13.48′
VPAWG	AHWATUKEE GOLF COURSE	N33°19.98′/W111°59.08′
VPAZM	ARIZONA MILLS	N33°23.43′/W111°57.88′
VPBAR	BARTLETT DAM	N33°49.10′/W111°37.92′
VPCCC	COUNTRY CLUB & CANAL	N33°30.73′/W111°50.37′
VPCNL	CANAL	N33°33.23′/W111°46.89°
VPFRB	FIREBIRD LAKE	N33°16.35′/W111°58.10′
VPFTN	FOUNTAIN HILLS	N33°36.12′/W111°42.72′
VPGLX	GILA CROSSING	N33°16.55′/W112°10.08′
VPGPP	GLENDALE POWER PLANT	N33°33.27′/W112°13.00′
VPMAR	MARICOPA	N33°03.42′/W112°02.88′
VPMHS	MESQUITE HIGH SCHOOL	N33°20.53′/W111°49.58′
VPNRV	NEW RIVER	N33°55.08′/W112°08.45′
VPNTT	NORTH TEST TRACK	N33°03.50′/W111°55.83′
VPPIR	PIR	N33°22.52′/W112°18.90′
VPQTR	QUINTERO GOLF COURSE	N33°49.53′/W112°23.58′
VPRVC	RIO VERDE COMMUNITY	N33°44.37′/W111°39.62′
VPSMC	SOUTH MOUNTAIN COLLEGE	N33°23.02′/W112°02.12′
VPSQP	SQUAW PEAK	N33°32.83′/W112°01.27′
VPSSS	SUPERSTITION SPRINGS MALL	N33°23.50′/W111°41.37′
VPSTN	SANTAN MOUNTAINS	N33°09.23′/W111°40.92′
VPSTT	SOUTH TEST TRACK	N32°56.25′/W111°59.67′
VPZZZ	_____	N33°20.18′/W111°26.53′

ST LOUIS TERMINAL AREA CHART/FLYWAY CHART

VPAGN	TV ANTENNA	N38°32.08′/W090°22.42′
VPBPE	_____	N38°23.80′/W090°20.38′
VPCJY	HOLIDAY SHORES	N38°55.00′/W089°56.00′
VPCOJ	WINFIELD DAM	N39°00.28′/W090°41.23′
VPDFA	JEFFERSON BARRACKS BRIDGE	N38°29.18′/W090°16.47′
VPEAZ	BUSCH STADIUM	N38°37.43′/W090°11.55′
VPEDZ	WATER TANKS	N38°45.30′/W090°34.87′
VPEGR	GAS TANKS	N38°35.80′/W090°19.32′
VPEOX	ST PETERS	N38°47.17′/W090°39.25′

WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPFAI	HOWELL ISLAND	N38°40.00′/W090°43.00′
VPFFY	_____	N38°55.37′/W090°17.30′
VPGPF	_____	N38°35.60′/W090°26.92′
VPGVI	_____	N38°32.30′/W090°27.80′
VPHRQ	CHAIN OF ROCKS BRIDGE	N38°45.88′/W090°10.42′
VPIBO	WATERLOO	N38°20.00′/W090°09.00′
VPJMU	HORSESHOE LAKE	N38°41.00′/W090°05.00′
VPKNY	PACIFIC	N38°29.00′/W090°44.00′
VPLES	ST CHARLES	N38°47.00′/W090°30.00′
VPLIW	SIX FLAGS	N38°30.67′/W090°40.47′
VPLXU	GATEWAY ARCH	N38°37.50′/W090°11.00′
VPNSY	WOOD RIVER REFINERIES	N38°50.00′/W090°05.00′
VPNZY	WENTZVILLE	N38°48.83′/W090°50.98′
VPRAZ	JERSEYVILLE	N39°07.00′/W090°20.00′
VPRMO	FOREST PARK	N38°38.00′/W090°17.00′
VPWKO	COLUMBIA	N38°27.00′/W090°12.00′
VPXXI	MILLSTADT	N38°27.50′/W090°05.68′
VPYID	MOSENTHEIN ISLAND	N38°43.00′/W090°12.25′

SALT LAKE CITY HELICOPTER CHART

VPAIR	SALTAIR	N40°44.85′/W112°11.22′
VPBEE	SOUTH INTERCHANGE	N40°38.18′/W111°54.23′
VPBRN	BARN	N40°54.28′/W112°10.15′
VPCAP	STATE CAPITOL	N40°46.67′/W111°53.25′
VPCHS	_____	N40°42.28′/W112°05.92′
VPCOP	BINGHAM COPPER MINE	N40°31.38′/W112°09.00′
VPCWY	CAUSEWAY	N41°05.37′/W112°07.17′
VPCYN	PARLEYS CANYON	N40°42.67′/W111°48.10′
VPFPC	FREE PORT CENTER	N41°05.92′/W112°02.27′
VPFPK	FRANCIS PEAK	N41°01.98′/W111°50.30′
VPGFS	GARFIELD STACK	N40°43.28′/W112°11.88′
VPHVE	SPAGHETTI BOWL	N40°43.50′/W111°54.22′
VPJRT	JORDAN RIVER TEMPLE	N40°35.02′/W111°55.58′
VPKSL	KSL ANTENNA	N40°46.80′/W112°05.80′
VPLGN	LAGOON AMUSEMENT PARK	N40°59.08′/W111°53.57′
VPMDH	MCKAY DEE HOSPITAL	N41°11.50′/W111°57.08′
VPMMT	MICROWAVE TOWERS	N40°48.50′/W111°53.37′
VPMSH	_____	N41°01.67′/W112°02.47′
VPNSL	_____	N40°50.15′/W111°54.90′
VPNTP	_____	N41°03.57′/W112°14.23′
VPOGE	GRAIN ELEVATOR	N41°13.13′/W112°00.45′
VPOPS	POWER STATION	N41°20.38′/W112°02.78′
VPPEN	STATE PRISON	N40°29.88′/W111°53.62′
VPPPT	PROMONTORY POINT	N41°12.28′/W112°25.73′
VPPTM	POINT OF THE MOUNTAIN	N40°27.42′/W111°54.83′
VPPVO	PROVO CANYON	N40°18.77′/W111°39.45′
VPRWY	_____	N40°48.48′/W112°00.33′
VPSLC	I–15/I–80 INTERCHANGE	N40°45.83′/W111°54.85′
VPTIP	SOUTH TIP	N40°50.93′/W112°10.92′
VPWBR	WEBER CANYON	N41°08.17′/W111°54.83′
VPWBT	_____	N40°38.00′/W112°03.33′

SALT LAKE CITY TERMINAL AREA CHART/FLYWAY CHART

VPAIR	SALTAIR	N40°44.85′/W112°11.22′
VPBEE	SOUTH INTERCHANGE	N40°38.18′/W111°54.23′
VPBRN	BARN	N40°54.28′/W112°10.15′
VPCAP	STATE CAPITOL	N40°46.67′/W111°53.25′
VPCHS	_____	N40°42.28′/W112°05.92′
VPCOP	BINGHAM COPPER MINE	N40°31.38′/W112°09.00′
VPCVI	CENTERVILLE INTERCHANGE	N40°55.30′/W111°53.43′
VPCWY	CAUSEWAY	N41°05.37′/W112°07.17′
VPCYN	PARLEYS CANYON	N40°42.67′/W111°48.10′
VPFPC	FREE PORT CENTER	N41°05.92′/W112°02.27′
VPFPK	FRANCIS PEAK	N41°01.98′/W111°50.30′
VPGFS	GARFIELD STACK	N40°43.28′/W112°11.88′

WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPHVE	SPAGHETTI BOWL	N40°43.50′/W111°54.22′
VPJRT	JORDAN RIVER TEMPLE	N40°35.02′/W111°55.58′
VPKSL	KSL ANTENNA	N40°46.80′/W112°05.80′
VPLGN	LAGOON AMUSEMENT PARK	N40°59.08′/W111°53.57′
VPMDH	MCKAY DEE HOSPITAL	N41°11.50′/W111°57.08′
VPMMT	MICROWAVE TOWERS	N40°48.50′/W111°53.37′
VPMSH	_____	N41°01.67′/W112°02.47′
VPNSL	_____	N40°50.15′/W111°54.90′
VPNTP	_____	N41°03.57′/W112°14.23′
VPOGE	GRAIN ELEVATOR	N41°13.13′/W112°00.45′
VPOPS	POWER STATION	N41°20.38′/W112°02.78′
VPPEN	STATE PRISON	N40°29.88′/W111°53.62′
VPPPT	PROMONTORY POINT	N41°12.28′/W112°25.73′
VPPTM	POINT OF THE MOUNTAIN	N40°27.42′/W111°54.83′
VPPVO	PROVO CANYON	N40°18.77′/W111°39.45′
VPRWY	_____	N40°48.48′/W112°00.33′
VPSLC	I–15/I–80 INTERCHANGE	N40°45.83′/W111°54.85′
VPTIP	SOUTH TIP	N40°50.93′/W112°10.92′
VPUOU	U OF U EVENTS CENTER	N40°45.73′/W111°50.28′
VPWBR	WEBER CANYON	N41°08.17′/W111°54.83′
VPWBT	_____	N40°38.00′/W112°03.33′
VPZOO	HOGLE ZOO	N40°45.00′/W111°48.95′

SAN DIEGO TERMINAL AREA CHART/FLYWAY CHART

VPLDP	DANA POINT	N33°27.62′/W117°42.87′
VPLSP	SIGNAL PEAK	N33°36.33′/W117°48.63′
VPOCN	_____	N33°14.15′/W117°26.63′
VPSBC	BARONA CASINO	N32°56.25′/W116°52.60′
VPSBL	_____	N33°05.18′/W117°18.55′
VPSBM	BLACK MOUNTAIN	N32°58.87′/W117°07.00′
VPSCF	_____	N32°48.55′/W117°09.17′
VPSCM	COWLES MOUNTAIN	N32°48.72′/W117°01.97′
VPSCP	CRYSTAL PIER	N32°47.77′/W117°15.42′
VPSCR	_____	N32°39.37′/W117°07.30′
VPSFB	IRON MOUNTAIN	N32°58.25′/W116°57.33′
VPSLJ	LAKE JENNINGS	N32°51.53′/W116°53.28′
VPSMB	_____	N32°45.57′/W117°12.22′
VPSMP	_____	N33°22.70′/W117°36.75′
VPSMS	MOUNT SOLEDAD	N32°50.40′/W117°15.10′
VPSMV	_____	N32°45.75′/W117°09.80′
VPSMW	MOUNT WOODSON	N33°00.52′/W116°58.23′
VPSOP	OTAY MESA PRISON	N32°35.82′/W116°55.28′
VPSOT	LOWER OTAY LAKE	N32°37.73′/W116°55.38′
VPSPL	SOUTH POINT LOMA	N32°39.90′/W117°14.55′
VPSPP	POWER PLANT	N33°08.25′/W117°20.23′
VPSQS	QUALCOMM STADIUM	N32°46.98′/W117°07.23′
VPSRT	DEL MAR RACE TRACK	N32°58.58′/W117°15.95′
VPSSM	SAN MIGUEL MOUNTAIN	N32°41.78′/W116°56.18′
VPSSV	SAN VICENTE ISLAND	N32°55.53′/W116°55.00′
VPSTP	TORREY PINES GOLF COURSE	N32°54.17′/W117°14.68′
VPSVA	_____	N33°11.48′/W117°16.38′

SAN FRANCISCO SECTIONAL CHART

VPKBG	KINGSBURY GRADE	N38°58.75′/W119°53.20′

SAN FRANCISCO TERMINAL AREA CHART/FLYWAY CHART

VPALT	ALTAMONT PASS	N37°44.35′/W121°35.42′
VPANT	ANTIOCH BRIDGE	N38°01.45′/W121°45.02′
VPBBR	BENICIA BRIDGE	N38°02.50′/W122°07.45′
VPCAL	CALAVERAS RESERVOIR	N37°28.16′/W121°48.93′
VPCBT	LAKE CHABOT	N37°43.68′/W122°06.94′
VPCOY	COYOTE HILLS	N37°32.50′/W122°05.06′
VPCQZ	CARQUINEZ BRIDGE	N38°03.66′/W122°13.52′
VPCRL	_____	N37°11.00′/W121°41.06′
VPCRY	CRYSTAL SPRINGS CAUSEWAY	N37°30.56′/W122°21.10′

WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPCSH	CAL STATE UNIVERSITY	N37°39.52′/W122°03.52′
VPDAM	DEL VALLE DAM	N37°36.91′/W121°44.78′
VPDLR	_____	N37°07.00′/W121°47.06′
VPDUB	DUBLIN	N37°42.06′/W121°55.36′
VPEMB	EMBASSY SUITES	N37°26.05′/W121°53.83′
VPGGF	GOLDEN GATE FIELDS	N37°53.07′/W122°18.71′
VPGIL	GILROY	N37°01.37′/W121°33.99′
VPHHH	HAMILTON	N38°03.58′/W122°30.66′
VPKGO	KGO	N37°31.58′/W122°06.10′
VPLEX	LEXINGTON RESERVOIR	N37°11.66′/W121°59.18′
VPMID	MID–SPAN SAN MATEO BRIDGE	N37°36.28′/W122°11.81′
VPMOR	MORMON TEMPLE	N37°48.46′/W122°11.95′
VPNUM	NUMMI PLANT	N37°29.56′/W121°56.58′
VPPAC	_____	N37°38.00′/W122°32.07′
VPPRU	PRUNEYARD	N37°17.33′/W121°56.01′
VPSAR	SARATOGA	N37°15.26′/W122°02.33′
VPSLA	SLAC/LINEAR ACCELERATOR	N37°24.75′/W122°14.35′
VPSTB	STINSON BEACH	N37°54.45′/W122°40.41′
VPSUN	SUNOL GOLF COURSE	N37°34.85′/W121°53.23′
VPUTC	U.T.C.	N37°13.93′/W121°41.35′
VPWAL	WALNUT CREEK	N37°53.78′/W122°04.30′
VPWAM	_____	N37°30.28′/W122°10.00′
VPWFR	CEMENT PLANT	N37°30.88′/W122°12.26′

TAMPA/ORLANDO TERMINAL AREA CHART/FLYWAY CHART

VPBOV	_____	N27°57.00′/W080°46.75′
VPCNY	_____	N28°30.00′/W080°45.00′
VPDAD	DADE CITY	N28°22.57′/W082°11.25′
VPDFI	_____	N29°00.17′/W081°20.85′
VPDUT	_____	N27°37.70′/W082°09.10′
VPEAR	CLEARWATER BEACH	N27°58.67′/W082°49.83′
VPFFU	_____	N28°57.08′/W081°00.33′
VPGPE	ST PETE BEACH	N27°43.50′/W082°44.67′
VPHUC	_____	N28°19.87′/W082°43.77′
VPKER	LAKE PARKER	N28°04.00′/W081°56.00′
VPLEV	_____	N28°48.00′/W080°52.00′
VPLJA	_____	N29°00.00′/W080°51.00′

WASHINGTON SECTIONAL CHART

VPACE	_____	N38°07.82′/W076°48.75′
VPAXI	_____	N38°34.57′/W076°20.38′
VPBRA	_____	N36°13.75′/W076°08.08′
VPGCE	_____	N36°03.90′/W076°36.42′
VPWZO	_____	N36°00.87′/W075°40.07′

VOR RECEIVER CHECKPOINTS AND VOT TEST FACILITIES (VOT)

The use of VOR airborne and ground checkpoints is explained in Aeronautical Information Manual, Basic Flight Information and ATC Procedures.

NOTE: Under columns headed Type of Checkpoint & Type of VOT Facility G stands for ground. A/ stands for airborne followed by figures (2300) or (1000-3000) indicating the altitudes above mean sea level at which the check should be conducted. Facilities are listed in alphabetical order, in the state where the checkpoints or VOTs are located.

CONNECTICUT

VOR RECEIVER CHECKPOINTS

Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag	Dist. from Fac. N.M.	Checkpoint Description
Carmel (Danbury Muni)	116.6/CMK	A/1500	050	6.7	Over apch end of Rwy 08.
Madison (Chester)	110.4/MAD	A/1500	076	9.4	Over small hangar.
Madison (Meriden Markham Muni)	110.4/MAD	A/1500	345	13.4	Over small hangar.
Norwich (Windham)	110.0/ORW	A/1500	339	13.9	Over intersection of rwy and twy.
Putnam (Danielson)	117.4/PUT	A/1300	211	8.5	Over int of ramp taxiway and rwy.

VOR TEST FACILITIES (VOT)

Facility Name (Airport Name)	Freq.	Type VOT Facility	Remarks
Bradley Intl	111.4	G	
Bridgeport (Igor I. Sikorsky Mem)	109.25	G	
Groton (Groton–New London)	110.25	G	
Hartford (Hartford–Brainard)	108.2	G	

DELAWARE

VOR RECEIVER CHECK POINTS

Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag	Dist. from Fac. N.M.	Checkpoint Description
Smyrna (Delaware Airpark)	111.4/ENO	A/1000	267	3.6	Over thld Rwy 27.
Wilmington (New Castle)	114.0/DQO	G	170	0.5	On runup pad Rwy 01. OTS indef.
		G	284	0.6	On Twy 'K' at Rwy 09.
		G	067	0.5	On Twy 'K' at Rwy 27. OTS indef.
Wilmington (Summit Airpark)	114.0/DQO	A/1200	219	10.8	Over rotating bcn. OTS indef.

MAINE

VOR RECEIVER CHECKPOINTS

Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag	Dist. from Fac. N.M.	Checkpoint Description
Bangor (Bangor Intl)	114.8/BGR	G	153	3.8	On runup area Rwy 33.
Kennebunk (Sanford Rgnl)	117.1/ENE	A/1300	267	4.5	Over Twy C and dsplcd thld Rwy 14.
Presque Isle (Caribou Muni)	116.4/PQI	A/1700	051	6.5	Over intersection of rwys.
Presque Isle (Northern Maine Rgnl Arpt at Presque Is)	116.4/PQI	A/2000	180	5.7	Over intersection of rwys.
Princeton (Princeton Muni)	114.3/PNN	A/1300	164	9.6	Over intersection of rwy and strip. OTS indef.

VOR TEST FACILITIES (VOT)

Facility Name (Airport Name)	Freq.	Type VOT Facility	Remarks
Portland Intl Jetport	111.0	G	
Bangor Intl	111.0	G	

MARYLAND

VOR RECEIVER CHECKPOINTS

Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag	Dist. from Fac. N.M.	Checkpoint Description
Frederick (Frederick Muni)	109.0/FDK	G	035	0.6	On runup pad apch end Rwy 23.
		G	359	0.6	Intersection Twys H and D.
Frederick (Montgomery County Airpark)	109.0/FDK	A/2000	155	17.2	Over apch end Rwy 14.
Hagerstown (Hagerstown Rgnl–Richard A Henson Fld)	109.8/HGR	A/1700	089	5.3	Over new ATCT.
Salisbury (Ocean City Muni)	111.2/SBY	A/1300	109	18.6	Intersection of twy and Rwy 32.
Salisbury (Salisbury-Ocean City Wicomico Rgnl)	111.2/SBY	G	221	0.7	Runup pad Rwy 05.

MASSACHUSETTS

VOR RECEIVER CHECKPOINTS

Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag	Dist. from Fac. N.M.	Checkpoint Description
Barnes (Barnes Muni)	113.0/BAF	G	207	1	From the facility.
Gardner (Fitchburg Muni)	110.6/GDM	A/1500	102	13.0	Over intersection of rwys.
Gardner (Metropolitan)	110.6/GDM	A/2000	097	1.9	Over intersection of twy and rwy.
Gardner (Orange Muni)	110.6/GDM	A/1500	292	10	Over parachute jump circle.
Gardner (Worcester Rgnl)	110.6/GDM	A/2000	167	18.8	Over intersection of Rwys 11–29 and 15–33.
Lawrence (Plum Island)	112.5/LWM	A/1500	089	11.8	Over apch end Rwy 10.
Marthas Vineyard (Marthas Vineyard)	114.5/MVY	G	216	0.7	On runup block for Rwy 06.
Nantucket (Nantucket Memorial)	116.2/ACK	G	242	1.9	On runup area at apch end Rwy 24.
Putnam (Southbridge Muni)	117.4/PUT	A/1700	329	12	Over intersection of twy and rwy.

VOT TEST FACILITIES (VOT)

Facility Name (Airport Name)	Freq.	Type VOT Facility	Remarks
Laurence G. Hanscom	110.0	G	
Gen. Ed. Lawrence Logan Intl.	111.0	G	
Worcester Rgnl	108.2	G	

NEW HAMPSHIRE

VOR RECEIVER CHECKPOINTS

Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag	Dist. from Fac. N.M.	Checkpoint Description
Berlin (Berlin Rgnl)	110.4/BML	A/2600	190	6.0	Over ski jump on W side of road.
	110.4/BML	G	191	3.4	Hold short line Rwy 18–36.
Gardner (Jaffrey Arpt–Silver Ranch)	110.6/GDM	A/2000	023	15.8	Over intersection of rwy and twy.
Lebanon (Lebanon Muni)	113.7/LEB	A/1600	246	5.0	Over intersection of Rwys 07-25 and 18-36.
	113.7/LEB	G	248	5.1	On Bravo-Two twy.
Pease (Portsmouth Intl at Pease)	116.5/PSM	G	015	0.4	North runup pad.
		G	157	1.5	On south runup pad.
Pease (Skyhaven)	116.5/PSM	A/1500	356	12.6	Over windsock.

NEW JERSEY

VOR RECEIVER CHECKPOINTS

Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag	Dist. from Fac. N.M.	Checkpoint Description
Cedar Lake (Millville Muni)	115.2/VCN	A/1500	215	11.4	Over intersection Rwys 10-28 and 14-32.
Coyle (Lakewood)	113.4/CYN	A/1000	048	18.9	Over apch end Rwy 06.
Coyle (Robert J. Miller Air Park)	113.4/CYN	A/1500	054	9.0	Over apch end Rwy 06.
Robbinsville (Trenton-Robbinsville)	113.8/RBV	A/1200	289	5.2	Over apch end Rwy 11.
Sea Isle (Cape May County)	114.8/SIE	A/1200	236	6.8	Over apch end Rwy 19.
Yardley (Trenton Mercer)	108.2/ARD	A/1500	080	4.5	Over ATCT.

NEW YORK

VOR RECEIVER CHECKPOINTS

Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag	Dist. from Fac. N.M.	Checkpoint Description
Binghamton (Greater Binghamton/Edwin A Link Fld)	112.2/CFB	G	075	7.6	On north ramp.
Binghamton (Tri-Cities)	112.2/CFB	A/2000	170	5.0	Over rwy intersection.
Carmel (Westchester County)	116.6/CMK	A/1500	215	14.0	Over center of arpt.
Dunkirk (Chautauqua Co/Dunkirk)	116.2/DKK	G	043	0.5	On twy adjacent to the apch end Rwy 24.
Glens Falls (Floyd Bennett Memorial)	110.2/GFL	G	034	0.5	On runup area Rwy 19.
Groton (Elizabeth Field)	110.85/GON	A/1200	183	4.8	Over intersection of rwys.
Huguenot	116.1/HUO	A/3000	222	6.2	Over monument on hill.
Huguenot (Randall)	116.1/HUO	A/1500	093	8.8	Over apch end Rwy 08.
Ithaca (Tompkins Rgnl)	111.8/ITH	G	157	0.8	On twy apch end Rwy 32.
Jamestown (Chautauqua County/ Jamestown)	114.7/JHW	A/2500	260	6.2	Over hangar NE corner of arpt.
Kingston (Sky Acres)	117.6/IGN	A/2500	070	5.0	Over intersection of twy and Rwy 17-35.
Kingston (Sky Park)	117.6/IGN	A/1500	010	18.8	Over apch end Rwy 01.
Poughkeepsie (Dutchess County)	114.3/PWL	A/1500	248	15.2	Over intersection Rwys 15-33 and 06-24.
Rockdale (Oneonta Muni)	112.6/RKA	A/3000	078	8.5	Over hangar.
Rockdale (Sidney Muni)	112.6/RKA	A/2200	229	12.5	Over hangar.
Rochester (Greater Rochester Intl)	110.0/ROC	G	98	0.6	On Twy 'K' between Twys 'F' and 'J'. (Near de–ice pad).
Saranac Lake	109.2/SLK	A/3000	141	4.2	Over microwave tower on Mt Pisgah.
Watertown (Watertown Intl)	109.8/ART	G	046	3.0	On ramp in front of administration building.

VOR TEST FACILITIES (VOT)

Facility Name (Airport Name)	Freq.	Type VOT Facility	Remarks
Albany County	108.2	G	Unusable runup and hold areas Twy M. Unusable runup pad, holding area and apch end of Rwy 19.
Buffalo Niagara Intl	109.0	G	
Islip (Long Island MacArthur)	109.4	G	
John F. Kennedy Intl	115.1	G	

PENNSYLVANIA

VOR RECEIVER CHECKPOINTS

Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag	Dist. from Fac. N.M.	Checkpoint Description
Bradford (Bradford Rgnl)	116.6/BFD	G	321	1.1	On SE twy midway between ramp and Rwy 32.
Clarion (Clarion County)	112.9/CIP	A/3000	286	10.9	Over center of interstate bridge/river.
East Texas (Allentown Queen City Muni)	110.2/ETX	A/1200	103	9.2	Over intersection of Rwys 07-25 and 14-32. Checkpoint unavbl indef.

Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag	Dist. from Fac. N.M.	Checkpoint Description
Erie (Erie Intl/Tom Ridge Fld)	109.4/ERI	G	060		6.1 NM on twy at apch end Rwy 06. Ground receiver checkpoint OTS.
Hazelton (Hazelton Muni)	109.4/HZL	G	093		On short twy midfield. VOR ground checkpoint OTS indef.
Lancaster (Lancaster)	117.3/LRP	G	306	0.5	On Twy M.
Milton (Bloomsburg Muni)	109.2/MIP	A/1500	108	10.3	Over threshold Rwy 08.
North Philadelphia (Northeast Philadelphia)	112.0/PNE	G	215		Twy F.
Philipsburg (Mid-State)	115.5/PSB	G	256	4.5	On twy near intersection of Rwys 06–24 and 16–34.
Philipsburg (University Park)	115.5/PSB	A/2500	132	7.6	Over intersection of Rwys 06-24 and 16-34.
Pottstown (Pottstown Muni)	116.5/PTW	A/1500	303	5.6	Over E hangar. VOR airborne checkpoint OTS indef.
Ravine (Muir AAF)	114.6/RAV	A/2500	179	7.7	Over water twr ½ NM NE of rwy.
Ravine (Schuylkill County/Joe Zerbey)	114.6/RAV	A/2000	060	13.9	Over intersection of Rwys 11-29 and 04-22. VOR airborne checkpoint OTS indef.
Solberg (Doylestown)	112.9/SBJ	A/1500	240	22.6	Over apch end Rwy 23.
Stonyfork (Wellsboro Johnston)	108.6/SFK	A/3600	111	6.5	Over 2558′ tower.
Wilkes-Barre (Pocono Mountains Muni)	111.6/LVZ	A/3000	131	16.2	Over intersection of Rwys 05–23 and 13–31.

VOR TEST FACILITIES (VOT)

Facility Name (Airport Name)	Freq.	Type VOT Facility	Remarks
Harrisburg Intl	110.0	G	
Philadelphia Intl.	109.8	G	Unusable west of Twy Y.

RHODE ISLAND

VOR RECEIVER CHECKPOINTS

Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag	Dist. from Fac. N.M.	Checkpoint Description
Providence (Newport State)	115.6/PVD	A/1400	164	13.4	Over intersection of rwys.
Providence (North Central State)	115.6/PVD	A/1500	360	12.2	Over intersection of rwys.
Groton (Block Island State)	110.85/GON	A/1800	129	23.5	Over terminal building.

VOR TEST FACILITIES (VOT)

Facility Name (Airport Name)	Freq.	Type VOT Facility	Remarks
Providence (Theodore Francis Green State)	108.2	G	

VERMONT

VOR TEST FACILITIES (VOT)

Facility Name (Airport Name)	Freq.	Type VOT Facility	Remarks
Burlington Intl.	109.0	G	

VIRGINIA

VOR RECEIVER CHECKPOINTS

Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag	Dist. from Fac. N.M.	Checkpoint Description
Cape Charles (Campbell Field)	112.2/CCV	A/1000	050	8.9	Over rwy intersection.
Cape Charles (Tangier Island)	112.2/CCV	A/1500	010	28.4	Over apch end Rwy 02.
Danville (Danville Rgnl)	113.1/DAN	G	340		At intersection of Twy A and hangar row near Twy E.
Flat Rock (Farmville Rgnl)	113.3/FAK	A/1600	257	31	Over intersection of twy and rwy.
Lynchburg (Lynchburg Rgnl-Preston Glenn Field)	109.2/LYH	G	026	5.0	West runup area adjacent to Rwy 22.
Norfolk (Norfolk Intl)	116.9/ORF	G	031		At center of twy E 250′ NW of centerline of Rwy 23.
Richmond	114.1/RIC	A/2100	306	8.5	Over 1054′ twr.
Richmond (Richmond Intl)	114.1/RIC	G	005	.9	On run up area Rwy 16 Twy.
		G	344	.9	On twy in front of Aeronautical Services hangar.
		G	138	.7	Twy front of Army Guard ramp.
		G	270	.7	On Twy J between Twys A and T.
South Boston (Danville Rgnl)	110.4/SBV	A/1500	255	16.8	Over terminal building.

WEST VIRGINIA

VOR RECEIVER CHECKPOINTS

Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag	Dist. from Fac. N.M.	Checkpoint Description
Lewisburg (Greenbrier Valley)	116.05/LWB	G	236	.7	On Twy A northwest on Twy E.
Martinsburg (Eastern West Virginia Rgnl Shepherd Fld)	112.1/MRB	G	281	6.2	At apch end Rwy 35.
		G	284		D twy south of Rwy 08–26.
		G	284		Twy C intersection with Rwy 08–26.
		G	287	6.5	In front of twr on twy A. VOR receiver checkpoint OTS.
Morgantown (Morgantown Muni-Walter L. Bill Hart Fld)	111.6/MGW	G	337	5.8	Intersection of Twys A and C.
Parkersburg (Mid–Ohio Valley Rgnl)	108.6/JPU	G	211°	6.3	Intersection of Twy A and Twy D.
		G	208	6.5	Twy J and apch end Rwy 28.
Wheeling (Wheeling Ohio Co)	112.2/HLG	G	223	5.9	On twy on east side of ramp.

VOR TEST FACILITIES (VOT)

Facility Name (Airport Name)	Freq.	Type VOT Facility	Remarks
Charleston (Yeager)	108.8	G	

The following tabulation lists all reported parachute jumping sites in the area of coverage of this directory. Unless otherwise indicated, all activities are conducted during daylight hours and under VFR conditions. The busiest periods of activity are normally on weekends and holidays, but jumps can be expected at anytime during the week at the locations listed. Jumps within restricted airspace are not listed.

All times are local and altitudes MSL unless otherwise specified.

Contact facility and frequency is listed at the end of the remarks, when available, in bold face type.

Refer to Federal Aviation Regulations Part 105 for required procedures relating to parachute jumping.

Organizations desiring listing of their jumping activities in this publication should contact the nearest FSS, tower or ARTCC.

Qualified parachute jumping sites will be depicted on the appropriate visual chart(s).

Note: (c) in this publication indicates that the parachute jump area is charted.

To qualify for charting, a jump area must meet the following criteria:

(1) Been in operation for at least 1 year.
(2) Operate year round (at least on weekends).
(3) Log 4,000 or more jumps each year.

In addition, jump sites can be nominated by FAA Regions if special circumstances require charting.

LOCATION	DISTANCE AND RADIAL FROM NEAREST VOR/VORTAC	MAXIMUM ALTITUDE	REMARKS
	CONNECTICUT		
(c) **Danielson Arpt**	8 NM; 211° Putnam	12,500	5 NM radius. Weekends and holidays.
(c) **Ellington Arpt**	17 NM; 025° Hartford	15,000	Fri, Sat, Sun, and occasional weekdays. 0.25 NM radius Pea Stone target
Harwinton	25 NM; 300° Hartford	7,200	0700-SS weekends.
	DELAWARE		
Georgetown, Sussex Co. Arpt	10 NM; 230° Waterloo	12,500	0900-SS Weekends; 1700-SS Wednesday.
Selbyville, Warrington Fld	17 NM; 079° Salisbury	15,000	Weekends and holidays.
(c) **Western Suxxex/Booth Fld**	12 NM; 356° Salisbury	12,000	5 NM radius. SR–SS daily.
	MAINE		
(c) **Lebanon**	13 NM; 275° Kennebunk	14,000	0800–SS daily.
Millinocket Muni Arpt	9.5 NM; 319° Millinocket	14,000 AGL	5 NM radius. Daily SR-SS.
	MARYLAND		
Accident	14 NM; 275° Grantsville		
Edgewood	29 NM; 056° Baltimore	10,000	Weekends, evenings, occasional weekdays
Gambrills, Dairy Farm Drop Zone	7 NM; 198° Baltimore	1300 AGL	0.5 NM radius. Weekends-November thru April.
Long Greene Drop Zone	21 NM; 038° Baltimore	10,000 AGL	0.5 NM radius. Weekends.
(c) **Ocean City Muni Arpt**	18 NM; 108° Salisbury	15,000	3 NM radius. 1 May–30 Nov continuous.
Patuxent River NAS (Trapnell Fld)	1.2 NM; 243° Patuxent	Unrestricted	0.25 NM radius. 1600-SS Mon–Fri, 0800–SS Sat, Sun, Holidays.
	0.7 NM; 303° Patuxent	Unrestricted	0.25 NM radius.
Sumang Drop Zone	20.3 NM; 286° Baltimore	3,000 AGL	0.4 NM radius. Weekends
Tewey Drop Zone	24 NM; 023° Baltimore	10,000 AGL	1 NM radius. Weekends
Unity Drop Zone	20 NM; 292° Baltimore	3,000 AGL	0.4 NM; radius. Weekends
	MASSACHUSETTS		
(c) **Ft. Devens, Turner Drop Zone**	18 NM; 115° Gardner	4,000 AGL	.5 NM radius. Daily SR-SS (occasionally nights) (occasionally to 20,000′.)
Marston Mills	20 NM; 045° Marthas Vineyard	10,000	1 NM radius 0700–SS daily
(c) **Montague, Turners Falls Arpt**	18 NM; 237° Keene	12,500 AGL	5 NM radius. SR-SS daily.
Natick Laboratory Sudbury	21 NM; 295° Boston	4,000 AGL	0.25 NM radius. 0800-1700 Mon-Fri

LOCATION	DISTANCE AND RADIAL FROM NEAREST VOR/VORTAC	MAXIMUM ALTITUDE	REMARKS
(c) **Orange Muni Arpt**	10 NM; 292° Gardner	14,000	1 NM radius. Thu–Sun and holidays. SR–one hr after SS. Boston Center 123.75
(c) **Pepperell, Sports Center Arpt**	13 NM; 233° Manchester	20,000 AGL	3 NM radius. Daily SR-SS frequently ngt ops.
	NEW JERSEY		
(c) **Belmar/Farmingdale, Monmouth Executive Arpt**	7 NM; 170° Colts Neck	13,500	3 NM radius. SR–SS Daily.
(c) **Chatsworth, Coyle Fld**	1 NM; 130° Coyle	2,000 AGL	Continuous. Heavy equip and paratroopers
(c) Cross Keys	10 NM; 355° Cedar Lake	14,000	1.5 NM radius. Daily SR–SS.
(c) **Lakehurst NAES (Maxfield Fld)**	0.9 NM; 280° Navy Lakehurst TACAN	12,500	0.3 NM radius. Daily SR-SS. Cargo drops ngts 2000′ and below
(c) **Sussex**	9 NM; 350° Sparta	15,000	1.5 NM radius. Daily 0700–SS.
	NEW YORK		
(c) **Albion, Pine Hill Arpt**	22 NM; 055° Buffalo	12,000′	2 NM radius. 0800–1 hour after SS, Wed thru Sun and holidays.
Arcade Tri–Co Arpt	24 NM; 162°Buffalo	10,000	5 NM radius. 0900-2100 SR-SS, Sat, Sun, and Wed.
Bloomingburg, Shan-Wan-Ga Valley Arpt	13 NM; 050° Huguenot	12,000	5 NM radius. 0900-SS daily.
(c) **Calverton**	1.5 NM; 150° Calverton	13,500	2 NM radius. Daily SR–SS.
(c) **Duanesburg Arpt**	14 NM; 280° Albany	13,000	3 NM radius. SR–SS daily.
(c) **East Moriches, Spadaro Arpt**	7 NM; 170° Calverton	14,000	1 NM radius, 0800-SS Sat and Sun. 1600-SS Wed.
Fort Drum	23 NM; 060° Watertown	1,000 AGL	1 NM radius. SR-SS Mon-Fri.
Gardiner Arpt	15 NM; 284° Kingston	14,500	4 NM radius. Daily SR–SS.
Hamiliton Muni Arpt	13 NM; 085° Georgetown	10,000 AGL	5 NM radius. Weekends.
(c) **Java**	21 NM; 157° Buffalo	13,000	5 NM radius. Daily SR-SS, occasionally til 2400
Johnstown, Fulco Arpt	27 NM; 315° Albany	15,000 AGL	3 NM radius. SR-SS Fri, Sat, Sun & holidays. Occasionally other days.
Kirkwood Arpk	18 NM; 130° Binghamton	12,000	5 NM radius. 1000-SS Sat & Sun.
(c) **Lexington-Prattville, Maben Arpt**	26 NM; 089° De Lancey	22,000	3 NM radius. SR-SS daily.
Newfane, Hollands Intl Arpt	21 NM; 353° Buffalo	18,000	5 NM radius. SR-SS daily; occasional ngts.
New Paltz, Stanton Arpt	15NM; 301° Kingston	14,000	3NM radius. Sat, Sun and holidays SR–SS, occasional ngts and other days.
(c) **Ovid Arpt**	18 NM; 313°Ithaca	13,500	2 NM radius. 0600-2400 daily.
(c) **Quaker Street, Knox Arpt**	15 NM; 280° Albany	14,000	3 NM radius. Daily SR-2400.
Rhinebeck, Old Rhinebeck Arpt	19 NM; 323° Pawling	4,900	2 NM radius. SR–SS Sat–Sun Jun 15–Oct 15.
(c) Scotia, Mohawk Valley	12 NM/318° Albany	12,000	5 NM radius. 0800–2400 daily.
Stormville Arpt	13NM; 215° Pawling	13,000 AGL	Daily, SR–SS.
(c) **Verona, Curtis Arpt**	21 NM; 304° Utica	10,000	5 NM radius. SR–SS daily Apr 1-Nov 30.
(c) **Wallkill**	25 NM; 062° Huguenot	14,500 AGL	1 NM radius. Daily 1200–0200.
West Bloomfield, Fort Hill Arpt	9 NM; 070° Geneseo	15,000	1200-1 hr after SS Wed-Fri; 0800-1 hr after SS Sat, Sun & holidays; occasional ngt till 2400.
Westhampton Beach, Francis S Gabreski Arpt.	10NM; 130° Calverton	13,000′ AGL	1NM radius. Tue thru Fri 1000-1400 13,000′ to sfc and 1400-2200 8,000′ to sfc.
(c) **West Point**	22 NM; 112° Huguenot	10,000	2 NM radius. Weekdays 1200-SS, weekends, occasionally.

LOCATION	DISTANCE AND RADIAL FROM NEAREST VOR/VORTAC	MAXIMUM ALTITUDE	REMARKS
PENNSYLVANIA			
Bethel, Grimes Arpt	16 NM; 112° Ravine	11,000	5 NM radius. SR–SS daily.
(c) **Burgettstown, Starveggi Drop Zone**	9 NM; 042° Wheeling WV	2000 AGL	1 NM radius. Tue-Thur 1030-2200; occasionally (by notam) Fri-Sun 0700-1800.
(c) **Chambersburg Franklin Co Rgnl Arpt**	14NM; 087° St Thomas	15,000 AGL	2NM radius. SR-SS daily.
Connellsville Arpt	14 NM; 272° Indian Head	15,000	4NM radius. Mar–Nov. Fri–Sun SR SS.
Culmerville Arpt	22 NM; 125° Ellwood City	11,500 AGL	Daily SR-SS
Doylestown	8 NM; 303° Yardley	12,500	Sat and Sun SR-SS
(c) **East Stroudsburg, Stroudsburg–Pocono Arpt**	13.4 NM; 291° Stillwater	14,500	2.5 NM radius. 0600–2200 daily.
(c) **Fort Indiantown Gap-Muir AAF, Cold Steel Drop Zone**	6.7 NM; 172°Ravine	800-2000 AGL	By NOTAM only. Military use. 5 NM radius.
(c) **Freedom, Kindelberger Landing Strip**	8.5 NM; 175° Ellwood City	14,500	3 NM radius. Weekends and holidays SR-SS, Wed 1600-SS, and occasional ngts.
Freefall Oz Arpt	14 NM; 252° Wellsville	12,500	5 NM radius. Wed–Sun 1300–2359.
(c) Germansville, Flying M Aerodrome	9 NM; 003° East Texas	14,000	1 NM radius. 0900–SS daily.
(c) Grove City Arpt	19.3 NM; 011° Ellwood City	15,000	3 NM radius. 0800–1900 EST, 0900–2230 EDT daily.
(c) **Hazleton Muni Arpt**	6 NM; 081° Hazleton	14,500	SR-SS weekends and holidays; 1500-SS weekdays
(c) **Jeannette, Greensburg Jeannette Rgnl**	19 NM; 089° Allegheny	12,000	1 NM radius. 1 Apr–31 Oct, Wed 1700–2100, Sat/Sun 1000–2100.
Jersey Shore, Hinaman Acres Arpt	23 NM; 240° Williamsport	13,000	Tue and Thur 1600-SS; Sat and Sun 0800-SS.
Littlestown, Kingsdale Airpark	13 NM; 345° Westminster	10,500	2 NM radius. 0900–2000 daily.
Meadville, Port Meadville	19 NM; 311° Franklin	12,500	Weekends SR-SS.
(c) **Mt. Joy/Marietta, Donegal Springs Airpark**	12 NM; 272° Lancaster	15,000	2 NM radius. SR-SS daily.
North East, Moorhead Arpk	21 NM; 065° Erie	12,000	5 mi radius. Extensive skydiving activities 1600–2100 weekdays and 0900–2100 weekends from surface to 12,000 ft MSL.
(c) **Perkasie, Pennridge Arpt**	15.9 NM; 060° Pottstown	14,500	5 NM radius. SR–SS daily, nights by NOTAM.
(c) **Tunkhannock, Skyhaven Arpt**	19 NM; 333° Wilkes–Barre	13,500 AGL	5 NM radius. SR–SS daily.
(c) **Worthington, J.T. Willie Arpt**	25 NM; 098° Ellwood City	14,000	1 NM radius. Weekends and holidays SR-SS, Fri 2200–SS, occasional ngts.
RHODE ISLAND			
Greene, Riconn Arpt	15 NM; 060° Norwich	12,500	Daily SR-SS.
(c) **Newport State**	13.3 NM; 164° Providence	10,000	1 NM radius. SR–SS daily Apr 1–Nov 30.
(c) **Pawtucket, North Central State Arpt**	12 NM; 001° Providence	13,000	3 NM radius. 0800–1 hour after SS daily. Mar 27–Dec 1.
VERMONT			
(c) **Addison, Ass–Pirin Acres Arpt**	21 NM; 219° Burlington	12,000	5 NM radius. SR–SS daily. Frequent night jumps.
Shelburne Arpt	3 NM; 240° Burlington	15,000	2 NM radius. Daily SR-SS.
VIRGINIA			
(c) **Blackstone, Allen C. Perkinson/ BAAF**	16 NM; 355° Lawrenceville	12,500 AGL	1 NM radius. Daily.
Forest, New London Arpt	5 NM; 274° Lynchburg	11,000	Daily SR-SS.
(c) **Fort A. P. Hill Bowling Green Drop Zone**	12 NM; 192° Brooke	12,000 AGL	1 NM radius. Continuously. Frequent night drops.
(c) **Fort Lee**	12 NM; 262° Hopewell	2,500 AGL	0.5 NM radius. Daily.
(c) **Fort Pickett Dove Drop Zone**	19 NM; 009° Lawrenceville	12,500 AGL	Drop Zone 1500 yards by 1000 yards. Daily.
(c) **Louisa Co/Freeman Fld**	8.6 NM; 097° Gordonsville	15,000	3 NM radius. 0800–dusk.

LOCATION	DISTANCE AND RADIAL FROM NEAREST VOR/VORTAC	MAXIMUM ALTITUDE	REMARKS
Moneta, Smith Mountain Lake Arpt	19.2 NM; 246° Lynchburg	13,500	3 NM radius. SR–SS Fri, Sat, Sun, and holidays.
(c) **Norfolk Intl Arpt**	8.5 NM; 085° Norfolk	13,000	Mon–Fri during daylgt hrs.
Oceana NAS	1.0 NM; 228° Oceana	12,500	Sat and Sun 0800–1200
(c) **Orange Co Arpt**	14.9 NM; 026° Gordonsville	15,000	3 NM radius. Daily SR–SS, frequently ngt ops.
(c) **Quantico**	11.5 NM; 349° Brooke	10,000	1 NM radius unscheduled weekends.
(c) **Somerville, Hartwood Arpt**	15 NM; 137° Casanova	13,000	2 NM radius. Weekends, holidays, occasionally other weekdays summer months.
(c) **Suffolk Executive Arpt**	20 NM; 104° Franklin	13,500	5 NM radius. SR-SS daily.
Warrenton, Flying Circus Aerodrome	8.5 NM; 132° Casanova	7,000	Sat/Sun, June 7–Oct 25, 1000–1959.
Waynesboro, Eagle's Nest Arpt	13 NM; 042° Montebello	10,000	1300-SS daily.
(c) **West Point, Middle Peninsula Rgnl**	4.4 NM; 340° Harcum	14,000	SR-SS weekends and holidays.
WEST VIRGINIA			
(c) **Arthurdale, Titus Field**	5 NM; 175° Morgantown	15,000 AGL	1 NM radius. Daily 0900-2100.
Buckhannon-Upshur Co	9 NM; 300° Elkins	15,000	1 NM radius. Weekdays and holidays
Huntington, Leann Drop Zone	15 NM; 230° Henderson	10,000 AGL	0.3 NM radius. Weekends.
Huntington, Debra Drop Zone	5 NM; 120° Henderson	10,000 AGL	0.5 NM radius. Weekends.
Morgantown, Bacon Drop Zone	5 NM; 150° Morgantown	10,000 AGL	0.5 NM radius. Weekends.
Morgantown, Cider Drop Zone	17 NM; 180° Morgantown	12,500 AGL	0.3 NM radius. Weekends.
Morgantown, Dawson AAF	12 NM; 126° Morgantown	10,000 AGL	0.3 NM radius. Weekends.
Morgantown, Doubt Drop Zone	12 NM; 140° Morgantown	12,500 AGL	1 NM radius. Weekends.
Morgantown, Float Drop Zone	13 NM; 110° Morgantown	12,500 AGL	0.5 NM radius. Weekends.
Morgantown, Guide Drop Zone	13 NM; 080° Morgantown	12,500 AGL	0.5 NM radius. Weekends.
Morgantown, Melon Drop Zone	13 NM; 097° Morgantown	12,500 AGL	0.5 NM radius. Weekends.
Morgantown, Piker Drop Zone	20 NM; 135° Morgantown	12,500 AGL	0.3 NM radius. Weekends.
Ravenswood, Jackson Co Arpt	41 NM; 215°Parkersburg	12,500 AGL	1000-SS Weekends.
Ripley, Evans Drop Zone	12 NM; 070°Henderson	12,000	1 NM radius. 0800-SS local, weekends.
Summersville Arpt	15 NM; 352° Rainelle	14,500	5 NM radius daily SR–SS.
Westover, Blue Horizon Drive-In	13 NM; 320° Morgantown	12,500	Weekends and holidays SR-SS.

The purpose of this bulletin is to provide major changes in aeronautical information that have occurred since the last publication date of each Sectional Aeronautical, VFR Terminal Area, and Helicopter Route Charts listed. The general policy is to include only those changes to controlled airspace and special use airspace that present a hazardous condition or impose a restriction on the pilot, and major changes to airports and radio navigational facilities, thereby providing the VFR pilot with the essential data necessary to update and maintain chart currency. The data is grouped by type and then by effective date. When a new edition of the Aeronautical Chart is published, the corrective tabulation will be removed from this bulletin. Inasmuch as this Bulletin provides major changes only, pilots should consult the airport listing in this directory for all new information. Users of U.S. World Aeronautical Charts (WAC) and U.S. Gulf Coast VFR Aeronautical Charts should consult the appropriate Sectional and VFR Terminal Area Charts for revisions.

Military Training Routes (MTRs) are shown on Sectional Aeronautical Charts, VFR Terminal Area, and Helicopter Route Charts. Only the route centerline, direction of flight and the route designator are shown — route widths and altitudes are not shown. Since these routes are subject to change every 56 days and the charts are reissued generally every 6 months, routes with a change in the alignment of the charted route centerline will be listed in this Aeronautical Chart Bulletin below. You are advised to contact the nearest FSS for route dimensions and current status for those routes affecting your flight.

BALTIMORE-WASHINGTON HELICOPTER ROUTE CHART
8th Edition, 30 Jul 2009

OBSTRUCTIONS
27 Aug 2009 – 3 Jun 2010 No Major Changes.

AIRPORTS
27 Aug 2009 No Major Changes.
22 Oct 2009 Change CTAF 122.9 to 123.025 at PIER 7 heliport. 39°16′20″N, 76°34′18″W.
Delete BOLLING AFB heliport, 38°50′34″N, 77°00′58″W.
17 Dec 2009 – 11 Feb 2010 No Major Changes.
8 Apr 2010 Change WASHINGTON DULLES INTL ATCT freq from 128.425 to 134.425, 38°56′40″N, 77°27′21″W.
3 Jun 2010 No Major Changes.

NAVAIDs
27 Aug 2009 – 3 Jun 2010 No Major Changes.

AIRSPACE
27 Aug 2009 – 3 Jun 2010 No Major Changes.

SPECIAL USE AIRSPACE
27 Aug 2009 – 3 Jun 2010 No Major Changes.

MILITARY TRAINING ROUTES
27 Aug 2009 – 3 Jun 2010 No Major Changes.

MISCELLANEOUS
27 Aug 2009 – 17 Dec 2009 No Major Changes.
11 Feb 2010 Revise HAYMARKET reporting point, 38°49.00′N, 77°38.27′W.
8 Apr 2010 – 3 Jun 2010 No Major Changes.

BALTIMORE-WASHINGTON TERMINAL AREA CHART
80th Edition, 11 Feb 2010

OBSTRUCTIONS
11 Feb 2010 – 8 Apr 2010 No Major Changes.
3 Jun 2010 Add obst 934′MSL (435′AGL) UC, 39°26′04″N, 77°58′33″W.

AIRPORTS
11 Feb 2010 No Major Changes.
8 Apr 2010 Change WASHINGTON DULLES INTL ATCT freq from 128.425 to 134.425, 38°56′40″N, 77°27′21″W.
3 Jun 2010 No Major Changes.

NAVAIDs
11 Feb 2010 – 3 Jun 2010 No Major Changes.

AIRSPACE
11 Feb 2010 – 3 Jun 2010 No Major Changes.

SPECIAL USE AIRSPACE
11 Feb 2010 – 3 Jun 2010 No Major Changes.

MILITARY TRAINING ROUTES
11 Feb 2010 – 3 Jun 2010 No Major Changes.

MISCELLANEOUS
11 Feb 2010 – 3 Jun 2010 No Major Changes.

BOSTON HELICOPTER ROUTE CHART
6th Edition, 20 Dec 2007

OBSTRUCTIONS
20 Dec 2007 – 3 Jun 2010 No Major Changes.

AIRPORTS
20 Dec 2007 – 10 Apr 2008 No Major Changes.
5 Jun 2008 Revise AMES HELIPORT position to, 42°37′53″N, 70°51′54″W.
31 Jul 2008 – 2 Jul 2009 No Major Changes.
27 Aug 2009 Revise MASS GENERAL heliport position to, 42°21′49″N, 71°04′08″W.
22 Oct 2009 – 3 Jun 2010 No Major Changes.

NAVAIDs
20 Dec 2007 – 3 Jun 2010 No Major Changes.

AIRSPACE
20 Dec 2007 – 3 Jun 2010 No Major Changes.

SPECIAL USE AIRSPACE
20 Dec 2007 – 3 Jun 2010 No Major Changes.

MILITARY TRAINING ROUTES
20 Dec 2007 – 3 Jun 2010 No Major Changes.

MISCELLANEOUS
20 Dec 2007 – 3 Jun 2010 No Major Changes.

BOSTON TERMINAL AREA CHART
76th Edition, 6 May 2010

OBSTRUCTIONS
3 Jun 2010 No Major Changes.

AIRPORTS
3 Jun 2010 Change DOWNTOWN PROVIDENCE from (R19) to (RI9) 41°49′27″N, 71°24′31″W.

NAVAIDs
3 Jun 2010 No Major Changes.

AIRSPACE
3 Jun 2010 No Major Changes.

SPECIAL USE AIRSPACE
3 Jun 2010 No Major Changes.

MILITARY TRAINING ROUTES
3 Jun 2010 No Major Changes.

MISCELLANEOUS
3 Jun 2010 No Major Changes.

CF-18 WORLD AERONAUTICAL CHART
39th Edition 22 Oct 2009

OBSTRUCTIONS
22 Oct 2009 – 17 Dec 2009 No Major Changes.
11 Feb 2010 Change obst from 1140′MSL(520′AGL) to 1579′MSL(679′AGL),42°48′02″N,89°03′16″W.
Add Obst 1131′MSL(500′AGL),41°31′49″N, 87°12′52″W.
Add Obst 1820′MSL(500′AGL),40°44′50″N,82°18′54″W.
Add Obst 1682′MSL(500′AGL),40°26′48″N,79°45′26″W.
8 Apr 2010 – 3 Jun 2010 No Major Changes.

AIRPORTS
22 Oct 2009 –3 Jun 2010 No Major Changes

NAVAIDS
22 Oct 2009 – 3 Jun 2010 No Major Changes.

AIRSPACE
22 Oct 2009 – 3 Jun 2010 No Major Changes.

SPECIAL USE AIRSPACE
22 Oct 2009 – 3 Jun 2010 No Major Changes.

MILITARY TRAINING ROUTES
22 Oct 2009 – 3 Jun 2010 No Major Changes.

MISCELLANEOUS
22 Oct 2009 – 3 Jun 2010 No Major Changes.

CG-21 WORLD AERONAUTICAL CHART
40th Edition, 24 Sep 2009

OBSTRUCTIONS
22 Oct 2009 Add obst 1348′MSL (600′AGL), 34°15′06″N, 84°59′12″W.
Change obst from 312′MSL to 1312′MSL, 33°35′33″N, 083°58′31″W.
17 Dec 2009 – 3 Jun 2010 No Major Changes.

AIRPORTS
22 Oct 2009 Change elevation from 191′ to 1911′ at Blairsville arpt, 34°51′16″N, 083°59′50″W.
Change runway orientation to 01/19 at Halifax-Northhampton Co Rgnl arpt, 36°19′47″N, 077°38′07″W.
17 Dec 2009 – 3 Jun 2010 No Major Changes.

NAVAIDs
22 Oct 2009 – 3 Jun 2010 No Major Changes.

AIRSPACE
22 Oct 2009 – 3 Jun 2010 No Major Changes.

SPECIAL USE AIRSPACE
22 Oct 2009 – 3 Jun 2010 No Major Changes.

MILITARY TRAINING ROUTES
22 Oct 2009 – 3 Jun 2010 No Major Changes.

MISCELLANEOUS
22 Oct 2009 – 3 Jun 2010 No Major Changes.

CINCINNATI SECTIONAL
83rd Edition, 17 Dec 2009

OBSTRUCTIONS
17 Dec 2009 No Major Changes.
11 Feb 2010 Add obst 1129′MSL (300′AGL)UC, 38°29′49″N, 82°51′18″W.
Add obst 1276′MSL (300′AGL)UC, 38°24′01″N, 83°09′38″W.
Add obst 1097′MSL (275′AGL)UC, 39°03′46″N, 84°59′04″W.
Add obst 1522′MSL (258′AGL)UC, 39°39′44″N, 80°04′00″W.
Add obst 1580′MSL (289′AGL)UC, 39°43′33″N, 80°12′37″W.
Add obst 2642′MSL (304′AGL)UC, 38°24′24″N, 80°47′10″W.
Add windmill farm. 4411′MSL UC, 38°05′27″N, 80°25′48″W.
8 Apr 2010 Add obst 1566′MSL (204′AGL)UC, 37°39′55″N, 83°57′21″W.
Add obst 1142′MSL (295′AGL)UC, 38°45′58″N, 84°53′45″W.
Add obst 1385′MSL (279′AGL)UC, 36°10′15″N, 84°02′17″W.
Add obst 1578′MSL (235′AGL)UC, 36°52′32″N, 84°12′59″W.
Add obst 1409′MSL (255′AGL)UC, 36°46′20″N, 84°45′59″W.
Add obst 1170′MSL (280′AGL)UC, 38°15′12″N, 84°37′40″W.
Add obst 1199′MSL (299′AGL)UC, 38°16′32″N, 84°57′02″W.
Add obst 1734′MSL (314′AGL)UC, 37°09′53″N, 83°23′10″W.
Add obst 1477′MSL (255′AGL)UC, 36°55′42″N, 84°14′33″W.
Add obst 786′MSL (310′AGL)UC, 36°14′41″N, 78°19′50″W.
Add obst 2210′MSL (260′AGL)UC, 36°23′13″N, 84°20′11″W.
Add obst 4716′MSL (389′AGL)UC, 38°04′46″N, 80°32′37″W.
Add obst 1695′MSL (315′AGL)UC, 37°10′09″N, 83°31′54″W.
Add obst 1792′MSL (306′AGL)UC, 37°36′25″N, 83°59′58″W.
Add obst 1138′MSL (300′AGL)UC, 38°20′21″N, 82°47′08″W.
Add obst 1280′MSL (258′AGL)UC, 38°51′21″N, 82°55′52″W.
Add obst 1008′MSL (216′AGL)UC, 39°20′01″N, 84°46′34″W.
Add obst 2610′MSL (415′AGL)UC, 38°49′04″N, 79°51′29″W.
Add obst 1612′MSL (311′AGL)UC, 38°09′58″N, 81°12′13″W.
Add obst 2509′MSL (315′AGL)UC, 39°02′16″N, 79°56′33″W.
Add obst 2434′MSL (315′AGL)UC, 39°00′23″N, 79°48′52″W.
Add obst 2422′MSL (289′AGL)UC, 39°18′45″N, 79°41′09″W.
Add obst 4726′MSL (389′AGL)UC, 38°03′56″N, 80°29′48″W.
Add obst 1917′MSL (290′AGL)UC, 39°24′46″N, 80°03′09″W.
Add obst 2314′MSL (260′AGL)UC, 37°46′35″N, 81°22′05″W.
Add obst 1872′MSL (408′AGL)UC, 37°41′43″N, 81°38′23″W.
Add obst 1433′MSL (340′AGL)UC, 38°18′44″N, 82°13′42″W.
Add obst 1798′MSL (360′AGL)UC, 39°29′40″N, 80°23′16″W.
Add obst 3352′MSL (315′AGL)UC, 38°21′38″N, 80°38′51″W.
Add obst 1772′MSL (315′AGL)UC, 39°35′16″N, 80°15′02″W.
Add obst 1318′MSL (300′AGL)UC, 38°13′32″N, 82°27′05″W.
Add obst 4248′MSL (320′AGL)UC, 37°46′25″N, 80°42′19″W.
Add obst 1498′MSL (289′AGL)UC, 39°42′45″N, 80°10′06″W.
Add obst 2189′MSL (289′AGL)UC, 39°19′20″N, 79°49′37″W.
Add obst 2905′MSL (360′AGL)UC, 38°09′10″N, 81°06′53″W.
Change windmill farm highest MSL from 4411′MSL to 4726′MSL (389′AGL)UC, 38°03′46″N, 80°30′08″W.
3 Jun 2010 Add obst 1147′MSL (281′AGL)UC, 38°06′40″N, 81°50′47″W.
Add obst 2329′MSL (256′AGL)UC, 38°06′29″N, 81°22′20″W.
Add obst 2904′MSL (311′AGL)UC, 38°03′37″N, 80°56′59″W.
Add obst 3159′MSL (230′AGL)UC, 37°41′44″N, 81°02′45″W.
Add obst 934′MSL (435′AGL)UC, 39°26′04″N, 77°58′33″W.
Add obst 1378′MSL (210′AGL)UC, 36°07′48″N, 83°28′33″W.
Add obst 2288′MSL (298′AGL)UC, 37°33′32″N, 80°47′10″W.
Add obst 840′MSL (210′AGL)UC, 38°47′06″N, 82°03′14″W.
Add obst 1432′MSL (310′AGL)UC, 38°32′59″N, 81°18′43″W.
Add obst 1117′MSL (308′AGL)UC, 38°22′48″N, 82°22′19″W.
Add obst 2427′MSL (480′AGL)UC, 39°06′54″N, 79°59′35″W.
Add obst 1288′MSL (315′AGL)UC, 39°31′10″N, 78°47′41″W.
Add obst 1238′MSL (260′AGL)UC, 38°18′26″N, 81°39′19″W.
Add obst 3342′MSL (250′AGL)UC, 39°22′57″N, 79°04′43″W.
Add obst 1357′MSL (250′AGL)UC, 39°56′02″N, 78°01′01″W.
Add obst 1266′MSL (308′AGL)UC, 38°15′55″N, 81°46′33″W.
Add obst 2652′MSL (245′AGL)UC, 37°35′37″N, 80°55′22″W.
Add windmill farm. 3226′ is highest MSL, 40°01′35″N, 78°48′07″W.

AIRPORTS
17 Dec 2009 No Major Changes.
11 Feb 2010 Delete KNORE arpt, 38°50′15″N, 82°50′05″W.
Delete ACTION arpt, 39°07′57″N, 84°49′43″W.
8 Apr 2010 No Major Changes.
3 Jun 2010 Change CTAF 122.8 to 122.9 at CYNTHIANA-HARRISON arpt, 38°21′58″N, 84°17′00″W

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NAVAIDs
17 Dec 2009 – 3 Jun 2010 No Major Changes.

AIRSPACE
17 Dec 2009 No Major Changes.
11 Feb 2010 Add MOUNTAIN CITY, TN Class E. That airspace extending upward from 700 feet above the surface within a 6.7 -mile radius of the Johnson County Airport and within 1.3 miles each side of the 065° bearing from the airport extending from the 6.7-mile radius to 10.9 miles northeast of the airport.
8 Apr 2010 – 3 Jun 2010 No Major Changes.

SPECIAL USE AIRSPACE
17 Dec 2009 – 3 Jun 2010 No Major Changes.

MILITARY TRAINING ROUTES
17 Dec 2009 – 3 Jun 2010 No Major Changes.

MISCELLANEOUS
17 Dec 2009 – 11 Feb 2010 No Major Changes.
8 Apr 2010 Change MEF 4^{7} to 4^{9} in quadrant 38°00′-38°30′N, 80°30′-81°00′W.
3 Jun 2010 No Major Changes.

DETROIT SECTIONAL
80th Edition, 8 Apr 2010

OBSTRUCTIONS
8 Apr 2010 No Major Changes.
3 Jun 2010 Add obst 1263′ MSL (500′AGL), 43°25′03″N, 82°48′57″W.
Add obst 2382′MSL (258′AGL)UC, 41°29′15″N, 77°09′28″W.
Add obst 1408′MSL (430′AGL)UC, 42°21′20″N, 84°01′28″W.
Add windmill farm. 1020′ is highest MSL, 42°00′42″N, 82°56′42″W.
Change windmill farm highest MSL from 2781′MSL UC to 2838′MSL UC, 41°45′40″N, 76°55′30″W.

AIRPORTS
8 Apr 2010 No Major Changes.
3 Jun 2010 Delete JEANNETTE HOSPITAL heliport, 40°19′13″N, 79°36′41″W.
Change ORANGEVILLE/LAUREL arpt to "Unverified", 43°55′01″N, 80°12′21″W.
Add CTAF 122.9 at GORILLA heliport, 42°25′30″N, 84°34′41″W.
Change BLOECHER arpt elevation from 430 to 1430 feet 42°45′07″N, 78°27′41″W.

NAVAIDs
8 Apr 2010 – 3 Jun 2010 No Major Changes.

AIRSPACE
8 Apr 2010 No Major Changes.
3 Jun 2010 Revise LIMA, OH. Class E. That airspace extending upward from 700 feet above the surface within a 6.6-mile radius of Lima Allen County Airport and within 3 miles each side of the Allen County VOR 090° radial extending from the 6.6-mile radius to 7.4 miles east of the VOR, and within a 6-mile radius of 40°43′58″N, 84°06′23″W, excluding the airspace within the Findlay, OH Class E airspace area.

SPECIAL USE AIRSPACE
8 Apr 2010 – 3 Jun 2010 No Major Changes.

MILITARY TRAINING ROUTES
8 Apr 2010 – 3 Jun 2010 No Major Changes.

MISCELLANEOUS
8 Apr 2010 No Major Changes.
3 Jun 2010 Change MEF 2^{9} to 3^{0} in quadrant 41°30′00″ - 42°00′00″N, 76°30′00″ - 77°00′00″W.

HALIFAX SECTIONAL
82nd Edition, 11 Mar 2010

OBSTRUCTIONS
8 Apr 2010 No Major Changes.
3 Jun 2010 Add obst 447′MSL (410′AGL), 46°26′05″N, 63°48′12″W.
Add obst 1296′MSL (389′AGL), 45°37′51″N, 67°58′48″W.

AIRPORTS
8 Apr 2010 – 3 Jun 2010 No Major Changes.

NAVAIDs
8 Apr 2010 – 3 Jun 2010 No Major Changes.

AIRSPACE
8 Apr 2010 – 3 Jun 2010 No Major Changes.

SPECIAL USE AIRSPACE
8 Apr 2010 – 3 Jun 2010 No Major Changes.

MILITARY TRAINING ROUTES
8 Apr 2010 – 3 Jun 2010No Major Changes.

MISCELLANEOUS
8 Apr 2010 – 3 Jun 2010 No Major Changes.

MONTREAL SECTIONAL
82nd Edition, 11 Mar 2010

OBSTRUCTIONS
8 Apr 2010 – 3 Jun 2010 No Major Changes.

AIRPORTS
8 Apr 2010 – 3 Jun 2010 No Major Changes.

NAVAIDs
8 Apr 2010 No Major Changes.
3 Jun 2010 Delete NEWPORT NDB, 44°57′10″N, 72°10′38″W.

AIRSPACE
8 Apr 2010 No Major Changes.
3 Jun 2010 Revise MONTREAL FLIGHT INFORMATION REGION TRANSITION AREA: That airspace 1300′ to 2000′ within the area bounded by a line beginning at 45°46′38″N, 74°15′22″W to 45°44′15″N, 74°09′05″W thence counter clockwise along the arc of a circle of 7 miles radius centered on 45°40′55″N, 74°00′19″W to 45°33′58″N, 73°59′21″W thence counter clockwise along the arc of a circle of 12 miles radius centered on 45°28′05″N, 73°44′29″W to 45°28′57″N, 74°01′30″W thence clockwise along the arc of a circle of 12 miles radius centered on 45°40′55″N, 74°00′19″W to 45°46′38″N, 74°15′22″W (point of beginning).
Revise GATINEAU CLASS E CONTROL ZONE: That airspace to below 700 feet AGL within the area bounded by a line beginning at 45°29′21″N, 75°40′24″W thence clockwise along the arc of a circle of 5 miles radius centered on 45°31′17″N, 75°33′51″W to 45°32′06″N, 75°26′50″W to 45°28′57″N, 75°34′55″W to 45°29′21″N, 75°40′24″W (point of beginning). That airspace from 700 feet AGL to 2500 feet ASL (2300 feet AAE) within the area bounded by a line beginning at 45°29′21″N, 75°40′24″W thence clockwise along the arc of a circle of 5 miles radius centered on 45°31′17″N, 75°33′51″W to 45°32′06″N, 75°26′50″W to 45°30′39″N, 75°26′16″W to 45°27′29″N, 75°34′31″W to 45°28′57″N, 75°34′55″W to 45°29′21″N, 75°40′24″W (point of beginning).

SPECIAL USE AIRSPACE
8 Apr 2010 – 3 Jun 2010 No Major Changes.

MILITARY TRAINING ROUTES
8 Apr 2010 – 3 Jun 2010 No Major Changes.

MISCELLANEOUS
8 Apr 2010 – 3 Jun 2010 No Major Changes.

NEW YORK HELICOPTER ROUTE CHART
9th Edition, 6 May 2010

OBSTRUCTIONS
3 Jun 2010 No Major Changes.

AIRPORTS
3 Jun 2010 No Major Changes.

NAVAIDs
3 Jun 2010 No Major Changes.

AIRSPACE
3 Jun 2010 No Major Changes.

SPECIAL USE AIRSPACE
3 Jun 2010 No Major Changes.

MILITARY TRAINING ROUTES
3 Jun 2010 No Major Changes.

MISCELLANEOUS
3 Jun 2010 No Major Changes.

NEW YORK SECTIONAL
81st Edition, 6 May 2010

OBSTRUCTIONS
3 Jun 2010 No Major Changes.

AIRPORTS
3 Jun 2010 Delete CTAF freq. 122.9 at LUTHER arpt, 43°01′45″N, 75°50′43″W.

NAVAIDs
3 Jun 2010 No Major Changes.

AIRSPACE
3 Jun 2010 No Major Changes.

SPECIAL USE AIRSPACE
3 Jun 2010 No Major Changes.

MILITARY TRAINING ROUTES
3 Jun 2010 No Major Changes.

MISCELLANEOUS
3 Jun 2010 No Major Changes.

NEW YORK TERMINAL AREA CHART
79th Edition, 6 May 2010

OBSTRUCTIONS
3 Jun 2010 No Major Changes.

AIRPORTS
3 Jun 2010 No Major Changes.

NAVAIDs
3 Jun 2010 No Major Changes.

AIRSPACE
3 Jun 2010 No Major Changes.

SPECIAL USE AIRSPACE
3 Jun 2010 No Major Changes.

MILITARY TRAINING ROUTES
3 Jun 2010 No Major Changes.

MISCELLANEOUS
3 Jun 2010 No Major Changes.

PHILADELPHIA TERMINAL AREA CHART
71st Edition, 11 Feb 2010

OBSTRUCTIONS
11 Feb 2010 – 3 Jun 2010 No Major Changes.

AIRPORTS
11 Feb 2010 – 8 Apr 2010 No Major Changes.
3 Jun 2010 Delete FLAT ROCK SEAPLANE BASE, 40°03′22N, 75°15′59″W. KUTZTOWN arpt. abandoned, 40°30′12″N, 75°47′13″W.

NAVAIDs
11 Feb 2010 – 3 Jun 2010 No Major Changes.

AIRSPACE
11 Feb 2010 – 3 Jun 2010 No Major Changes.

SPECIAL USE AIRSPACE
11 Feb 2010 – 3 Jun 2010 No Major Changes.

MILITARY TRAINING ROUTES
11 Feb 2010 – 3 Jun 2010 No Major Changes.

MISCELLANEOUS
11 Feb 2010 – 3 Jun 2010 No Major Changes.

PITTSBURGH TERMINAL AREA CHART
73rd Edition, 8 Apr 2010

OBSTRUCTIONS
8 Apr 2010 – 3 Jun 2010 No Major Changes.

AIRPORTS
8 Apr 2010 No Major Changes.
3 Jun 2010 Delete JEANNETTE HOSPITAL heliport, 40°19′13″N, 79°36′41″W.

NAVAIDs
8 Apr 2010 – 3 Jun 2010 No Major Changes.

AIRSPACE
8 Apr 2010 – 3 Jun 2010 No Major Changes.

SPECIAL USE AIRSPACE
8 Apr 2010 – 3 Jun 2010 No Major Changes.

MILITARY TRAINING ROUTES
8 Apr 2010 – 3 Jun 2010 No Major Changes.

MISCELLANEOUS
8 Apr 2010 – 3 Jun 2010 No Major Changes.

WASHINGTON SECTIONAL
87th Edition, 11 Feb 2010

OBSTRUCTIONS
11 Feb 2010 No Major Changes.
8 Apr 2010 Add obst 371′MSL (310′ AGL), 36°15′27″N, 77°30′00″W.
3 Jun 2010 Add obst 934′MSL (435′AGL)UC, 39°26′04″N, 77°58′33″W.
Add obst 1288′MSL (315′AGL)UC, 39°31′10″N, 78°47′41″W.
Add obst 1357′MSL (250′AGL)UC, 39°56′02″N, 78°01′01″W.

AIRPORTS
11 Feb 2010 No Major Changes.
8 Apr 2010 HALIFAX COUNTY arpt closed, 36°26′22″N, 77°42′33″W.
Add CTAF 126.2 at A P HILL (FORT A P HILL) arpt, 38°04′07″N, 77°19′06″W.
Change WASHINGTON DULLES INTL ATCT freq from 128.425 to 134.425, 38°56′40″N, 77°27′21″W.
3 Jun 2010 No Major Changes.

NAVAIDs
11 Feb 2010 – 3 Jun 2010 No Major Changes.

AIRSPACE
11 Feb 2010 – 3 Jun 2010 No Major Changes.

SPECIAL USE AIRSPACE
11 Feb 2010 – 3 Jun 2010 No Major Changes.

MILITARY TRAINING ROUTES
11 Feb 2010 – 3 Jun 2010 No Major Changes.

MISCELLANEOUS
11 Feb 2010 – 3 Jun 2010 No Major Changes.

SUPPLEMENTAL COMMUNICATION REFERENCE

Contained within this tabulation, and listed alphabetically by airport name, are all private–use airports charted on the U.S. IFR Enroute Low and High Altitude charts in the United States, having terminal approach and departure control facilities. Additionally, listed by country, are all Canadian and Mexican airports that appear on the U.S. IFR Enroute charts with approach and departure control services. All frequencies transmit and receive unless otherwise noted. Radials defining sectors are outbound from the facility.

UNITED STATES

FACILITY NAME	CHART & PANEL
Frankfort, IL (LL4Ø) Chicago App/Dep Con 133.1 285.6	L–28H
Glasgow Industrial, MT (Ø7MT) Salt Lake Center App/Dep Con 126.85 305.2	H–1E, 2F, L–13D
USAF Academy Bullseye Aux Airstrip, CO (CO9Ø) ASOS 118.325	L–10F
West Kentucky Airpark, KY (5KY3) Memphis Center App/Dep Con 133.65 292.15	L–16I
William P Gwinn, FL (Ø6FA) Gwinn Tower 120.4 279.25 (Mon–Fri 1300–2100Z‡) Gnd Con 121.65 279.25	H–8I, L–23C

CANADA

FACILITY NAME	CHART & PANEL
Abbotsford, BC (CYXX) ATIS 119.8 (1500–0700Z‡) Victoria Trml App/Dep Con 132.7 (Avbl on ground) 290.8 Tower 119.4 (Inner) 121.0 (Outer) 295.0 (1500–0700Z‡) Gnd Con 121.8 MF 119.4 295.0 (0700–1500Z‡) (Shape irregular to 4500′)	H–1B, L–12F
Amos/Magny, QC (CYEY) Montreal Center App/Dep Con 125.9	H–11B
Atikokan Muni, ON (CYIB) MF 122.3 (5 NM to 4500′ No ground station)	L–14I
Barrie–Orillia (Lake Simcoe Rgnl), ON (CYLS) AWOS 122.55 (Pvt) Toronto Center App/Dep Con 124.025	H–11B, L–31D
Bar River, ON (CPF2) Toronto Center App/Dep Con 132.65	L–31C
Bathurst, NB (CZBF) Moncton Center App/Dep Con 134.25	L–32J
Boundary Bay, BC (CZBB) ATIS 125.5 (1500–0700Z‡) Vancouver App/Dep Con 132.3 363.8 Tower 118.1 (Inner) 127.6 (Outer) (1500–0700Z‡) Gnd Con 124.3 MF 118.1 (0700–1500Z‡ to 2000′. Vancouver Trml 125.2 above 2000′. Shape irregular to 2500′.)	H–1B, L–1E
Brampton, ON (CNC3) Toronto Trml App/Dep Con 119.3 253.1	L–31D
Brandon Muni, MB (CYBR) Winnipeg Center App/Dep Con 132.25 285.4 MF 122.1 (5 NM to 4000′)	H–2H
Brantford, ON (CYFD) Toronto Trml App/Dep Con 128.27	L–31D
Brockville–Thousand Islands Rgnl Tackaberry, ON (CNL3) Montreal Center App/Dep Con 134.675	L–32G
Bromont, QC (CZBM) Montreal Center App/Dep Con 132.35 MF 122.15 (5 NM to 3400′)	L–32G
Burlington Airpark, ON (CZBA) Toronto Center App/Dep Con 119.3 253.1	L–31D
Castlegar/West Kootenay Rgnl, BC (CYCG) Vancouver Center App/Dep Con 134.2 227.3 MF 122.1 (5 NM to 6500′)	H–1C
Centralia/James T. Fld Muni, ON (CYCE) Toronto Center App/Dep Con 135.30	H–10G, 11B, L–31D
Charlottetown, PE (CYYG) Moncton Center App/Dep Con 135.65 384.8 MF 118.0 (5 NM to 3200′)	H–11E, L–32J
Chatham–Kent, ON (CNZ3) Cleveland Center App/Dep Con 132.25	H–10G, L–30G

FACILITY NAME	CHART & PANEL
Collingwood, ON (CNY3) Toronto Center App/Dep Con 124.02	H–11B, L–31D
Cornwall Rgnl, ON (CYCC) Boston Center App/Dep Con 135.25 377.1	L–32G
Cranbrook/Canadian Rockies Intl, BC (CYXC) Vancouver Center App/Dep Con 133.6 MF 122.3 (5 NM to 6100′)	H–1C
Debert, NS (CCQ3) Halifax Trml App/Dep Con 119.2	H–11E, L–32J
Digby, NS (CYID) Moncton Center App/Dep Con 123.9	L–32J
Downsview, ON (CYZD) Toronto Center App/Dep Con 133.4 MF 126.2 (1300–2300Z‡, 3 NM to 1700′)	H–11B, L–31E
Drummondville, QC (CSC3) Montreal Center App/Dep Con 132.35	L–32H
Earlton (Timiskaming Rgnl), ON (CYXR) MF 122.0 (5 NM to 3800′) AWOS 128.6	H–11B
Elliot Lake Muni, ON (CYEL) Toronto Center App/Dep Con 135.4	L–31C
Fort Frances Muni, ON (CYAG) Minneapolis Center App/Dep Con 120.9	L–14H
Fredericton Intl, NB (CYFC) ATIS 127.55 (1045–0245Z‡, OT AWOS) Moncton Center App/Dep Con 124.3 135.5 270.8 Tower 119.0 (1045–0245Z‡) Gnd Con 121.7 (1045–0245Z‡) MF 119.0 (0245–1045Z‡, 5 NM to 3500′)	H–11E, L–32I
Goderich, ON (CYGD) Toronto Center App/Dep 135.3 266.3	H–11B, L–31D
Greenwood, NS (CYZX) ATIS 128.85 244.3 (1100–0000Z‡) App/Dep Con 120.6 335.9 Tower 119.5 126.2 236.6 324.3 Gnd Con 133.75 289.4 Clnc Del 128.025 283.9	H–11E, L–32J
Grimsby Air Park, ON (CNZ8) Toronto Trml App/Dep Con 128.27 268.75 Tower 125.0 308.475	L–31E
Halifax/Shearwater, NS (CYAW) ATIS 129.175 (Ltd hrs) App/Dep Con 119.2 Tower 119.0 126.2 340.2 360.2 (Ltd hrs) Gnd Con 121.7 250.1	H–11E, L–32J
Halifax/Stanfield Intl, NS (CYHZ) ATIS 121.0 Moncton Center App/Dep Con 118.7 119.2 128.55 135.3 363.8 Tower 118.4 236.6 Gnd Con 121.9 275.8 Clnc Del 123.95 Apron Advisory 122.125	H–11E, L–32J
Hamilton, ON (CYHM) ATIS 128.1 Toronto Trml App/Dep Con 128.27 268.75 Tower 119.7 125.0 Gnd Con 121.6	H–10H, 11B, L–11B
Kingston, ON (CYGK) Montreal Center App/Dep Con 135.05 398.4 (0400–1115Z‡) MF 122.5 (1115–0400Z‡ 5 NM to 3300′)	H–11C, L–31E, 32F
Kitchener/Waterloo, ON (CYKF) ATIS 125.1 (1200–0400Z‡) Toronto Trml App/Dep Con 128.275 Waterloo Tower 126.0 118.55 (1200–0400Z‡) Gnd Con 121.8 MF 126.0 (0400–1200Z‡ 5 NM to 4000′)	H–11B, L–31D
Lachute, QC (CSE4) Montreal Center App Con 124.65 132.85 268.3 Montreal Center Dep Con 132.85 268.3	L–32G
La Tuque, QC (CYLQ) Montreal Center App/Dep Con 134.5	H–11C
Langley, BC (CYNJ) ATIS 124.5 (1630–0230Z, DT 1530–0330Z) Victoria Trml 132.7 290.8 Tower 119.0 (1630–0230Z, DT 1530–0330Z) Gnd Con 121.9 MF 119.0 (0230–1630Z, DT 0330–1530Z 3 NM to 1900′)	L–1E

FACILITY NAME	CHART & PANEL
Leamington, ON (CLM2)	L–30F
Cleveland Center App/Dep Con 132.45	
Lethbridge, AB (CYQL)	H–1D
ATIS 124.4 (1300–0545Z‡)	
Edmonton Center App/Dep Con 132.75 265.2 MF 121.0 (5 NM to 6000′)	
Lindsay, ON (CNF4)	L–31E, L–32F
Toronto Center App/Dep 134.25	
Liverpool/South Shore Rgnl, NS (CYAU)	L–32J
Moncton Center App/Dep Con 123.9	
London, ON (CYXU)	H–10G, 11B,
ATIS 127.8 (1120–0345Z‡)	L–30G, 31D
Toronto Center App/Dep 135.3 135.625	
Tower 119.4 125.65 (1120–0345Z‡) Gnd Con 121.9	
MF 119.4 (0345–1120Z‡ 5 NM to 3000′)	
Manitowaning/Manitoulin East Muni, ON (CYEM)	L–31C
Toronto Center App/Dep 135.4 260.9	
Maniwaki, QC (CYMW)	L–32G
Montreal Center App/Dep Con 126.57	
Mascouche, QC (CSK3)	L–32G
MF 122.35 (5 NM to 2500′. No gnd station. Excluding the portion S of the	
N shore of Riviere des Milles–Iles and 1 NM around Lac Agile Mascouche arpt.)	
Medicine Hat, AB (CYXH)	H–1D
AWOS 124.875 (0345–1245Z‡)	
MF 122.2 (1245–0345Z‡ 5 NM to 5400′)	
Midland/Huronia, ON (CYEE)	L–31D
Toronto Center App/Dep 124.025	
Miramichi, NB (CYCH)	H–11E, L–32J
Moncton Center App/Dep Con 123.7	
Moncton/Greater Moncton Intl, NB (CYQM)	H–11E, L–32J
ATIS 128.65	
App/Dep 124.4 Tower 120.8 236.6 Gnd Con 121.8 275.8	
Apron Advisory 122.075	
Mont–Laurier, QC (CSD4)	L–32G
Montreal Center App/Dep Con 126.57	
Montreal Intl (Mirabel), QC (CYMX)	H–11C, 12K, L–32G
ATIS 125.7	
Montreal Center App Con 124.65 132.85 268.3	
Montreal Dep Con 132.85 268.3	
MF 119.1 (7 NM shape irregular to 2000′) VFR Advisory 134.15	
Montreal/Pierre Elliott Trudeau Intl, QC (CYUL)	H–11C, 12K, L–32G
ATIS 133.7	
Montreal Trml App Con 118.9 124.65 126.9 132.85 268.3	
Tower 119.9 267.1 Gnd Con 121.9 275.8 Clnc Del 125.6 Apron 122.075	
Montreal Trml Dep Con 118.9 (SE–S–SW) 124.65 268.3 (W–NW–NE)	
VFR Advisory 134.15	
Montreal/St–Hubert, QC (CYHU)	H–11C, L–32G
ATIS 124.9 (Apr–Oct 1045–0500Z‡, Nov–Mar 1045–0400Z) AWOS 124.9	
Montreal Center App/Dep Con 125.15 268.3	
St. Hubert Tower 118.4 (Apr–Oct 1045–0500Z‡, Nov–Mar 1045–0400Z)	
Gnd Con 126.4 MF 118.4 (Apr–Oct 0500–1045Z‡, Nov–Mar	
0400–1045Z 5 NM shape irregular to 2500′) VFR Advisory 134.15	
Muskoka, ON (CYQA)	H–11B, L–31D
AWOS 124.575	
MF 122.3 (5 NM to 3900′)	
Nanaimo, BC (CYCD)	H–1B, L–1E
Victoria Trml App/Dep 120.8 133.95 252.3 MF 122.1 1330–0530Z‡ (5 NM to 2500′)	
North Bay, ON (CYYB)	H–11B, L31D
ATIS 124.9 (1130–0330Z‡)	
Toronto Center App/Dep 121.225 127.25	
MF 118.3 (1130–0330Z‡ 7 NM to 5000′)	
Oshawa, ON (CYOO)	L–31E
ATIS 125.675 (1130–0330Z‡)	
Toronto Trml App/Dep Con 133.4	
Tower 120.1 (1130–0330Z‡) Gnd Con 118.4	
MF 120.1 (0330–1130Z‡ 5 NM to 3000′)	

FACILITY NAME	CHART & PANEL
Ottawa/Carp, ON (CYRP) ATIS 121.15 Ottawa Trml App/Dep Con 128.175 252.5	L–31E, 32F
Ottawa/Gatineau, QC (CYND) Ottawa Trml App/Dep Con 127.7 128.175 MF 122.3 (5 NM shape irregular to 2500′) VFR Advisory Ottawa Trml 127.7	H–11C, L–32G
Ottawa/MacDonald–Cartier Intl, ON (CYOW) ATIS 121.15 Ottawa App Con 135.15 Tower 118.8 (VFR South) 120.1 (VFR North) 118.8 341.3 Gnd Con 121.9 Clnc Del 119.4 Ottawa Dep Con 128.175	L–11C
Owen Sound/Billy Bishop Rgnl, ON (CYOS) Toronto Center App/Dep 132.575 290.6	L–31D
Pelee Island, ON (CYPT) Cleveland Center App/Dep Con 126.35 360.0	L–30F
Pembroke, ON (CYTA) Montreal Center App/Dep Con 135.2 Petawawa Advisory 126.4 250.1 (Mon–Fri 1300–2130Z‡, OT PPR)	H–11C, L–31E, 32F
Penticton, BC (CYYF) Vancouver Center App/Dep Con 133.5 351.3 MF 118.5 (5 NM to 4100′)	H–1B
Peterborough, ON (CYPQ) AWOS 126.925 Toronto Center App/Dep 134.25	H–11B, L–31E, 32F
Pincher Creek, AB (CZPC) Edmonton Center App/Dep Con 132.75 265.2	H–1D
Pitt Meadows, BC (CYPK) ATIS 125.0 (1500–0700Z‡) Vancouver Center App Con 128.6 352.7 (Outer) Pitt Tower 126.3 (1500–0700Z‡) Gnd Con 123.8 Vancouver Center Dep Con 132.3 363.8 (South) MF 126.3 (0700–1500Z‡) (3NM to 2500′)	L–1E
Quebec/Jean Lesage Intl, QC (CYQB) ATIS 134.6 Montreal Center App/Dep Con 124.0 127.85 135.025 270.9 322.8 Tower 118.65 236.6 Gnd Con 121.9 250.0	H–11D, L–32H
Riviere Du Loup, QC (CYRI) AWOS 122.025 (Pvt) Montreal Center App/Dep Con 125.1 299.6	H–11D
Rouyn Noranda, QC (CYUY) Montreal Center App/Dep Con 125.9 MF 122.2 (5 NM to 4000′)	H–11B
Saint John, NB (CYSJ) Moncton Center App/Dep Con 124.3 135.5 270.8 MF 118.5 (5 NM to 3400′)	H–11E, L–32J
Sarnia (Chris Hadfield), ON (CYZR) AWOS 119.125 Toronto Center 134.375	H–10G, 11B, L–30F
Sault Ste Marie, ON (CYAM) ATIS 133.05 (1300–0100Z‡) Toronto Center App/Dep Con 132.65 344.5 Tower 118.8 (1300–0100Z‡) Gnd Con 121.7 MF 118.8 (0100–1300Z‡ 5 NM irregular shape to 3000′)	H–2K, L–31B
Sherbrooke, QC (CYAM) AWOS 126.25 Montreal Center App/Dep Con 132.55 MF 123.5 (Ltd hrs 5 NM to 3800′)	H–11D, L–32H
South Renfrew Muni, ON (CNP3) Montreal Center App/Dep 124.275	L–31E, 32F
Southport, MB (CYPG) ATIS 120.85 (Mon–Fri 1400–2300Z‡ except holidays) Tower 126.2 384.2 (Mon–Fri 1400–2300Z‡ except holidays) Gnd Con 121.7 275.8	H–2H

FACILITY NAME	CHART & PANEL
Springwater Barrie Airpark, ON (CNA3) Toronto Center App/Dep Con 124.025	L–31D
St. Catherines/Niagara District, ON (CYSN) ATIS 128.525 (1215–0200Z‡) Toronto Trml App/Dep Con 133.4 253.1 MF 123.25 (1215–0200Z‡ 5 NM to 3300′)	H–10H, 11B, L–31E
St. Frederic, QC (CSZ4) Montreal Center App/Dep Con 135.025 270.9	L–32H
St. Georges, QC (CYSG) Montreal Center App/Dep Con 132.35 MF 122.15 (5 NM 3900′ ASL)	H–32H, L–11D
St. Jean, QC (CYJN) Montreal Center App/Dep Con 125.15 268.3 Tower 118.2 (Apr–Oct 1230–0230Z‡ Nov–Mar 1300–0200Z‡) Gnd Con 121.7	L–32G
Sudbury, ON (CYSB) ATIS 127.4 Toronto Center App/Dep Con 135.5 MF 125.5 (7 NM to 4000′)	H–31B, 10G, L–31D
Summerside, PE (CYSU) AWOS 122.55 (Pvt) Moncton Center App/Dep Con 124.4 384.8	H–11E, L–32J
Thunder Bay, ON (CYQT) ATIS 128.8 (1100–0400Z‡) Winnipeg Center App/Dep Con 132.125 (0400–1100Z‡) Tower 118.1 (1100–0400Z‡) Gnd Con 121.9 App/Dep 119.2 MF 118.1 (0400–1100Z‡ 5 NM to 4000′)	H–2J, L–14J
Timmins/Victor M. Power, ON (CYTS) ATIS 124.95 (1000–0500Z‡) Toronto Center App/Dep Con 128.3 MF 122.3 (5 NM to 4000′)	H–11B
Toronto/Buttonville Muni, ON (CYKZ) ATIS 127.1 (1200–0400Z‡) Toronto Trml App/Dep Con 133.4 Tower 124.8 119.9 (1200–0400Z‡) Gnd Con 121.8 MF 124.8 (0400–1200Z‡ No gnd station. 5 NM shape irregular to below 2500′)	L–31E
Toronto/Billy Bishop Toronto City Airport, ON (CYTZ) ATIS 133.6 (1130–0400Z‡) App/Dep Con 133.4 Tower 118.2 119.2 (1130–0400Z‡) Gnd Con 121.7	L–31E
Toronto/Lester B Pearson Intl, ON (CYYZ) ATIS 120.825 App Con 124.475 125.4 132.8 Dep Con 127.575 128.8 Tower 118.35 118.7 Gnd Con 118.0 119.1 121.65 121.9 Clnc Del 121.3 (1200–0400Z‡)	H–11B, L–31D
Trenton, ON (CYTR) ATIS 135.45 257.7 App/Dep Con 128.4 324.3 Tower 128.7 236.6 Gnd Con 121.9 275.8 Clnc Del 124.35 286.4	H–11C, L–31E, 32F
Trenton/Mountain View, ON (CPZ3) Trenton Mil Advisory 268.0	H–11C, L–31E, 32F
Trois–Rivieres, QC (CYRQ) Montreal Center App/Dep Con 128.225 229.2 MF 123.0 (5 NM to 3200′)	H–11C, L–32H
Val–D'or, QC (CYVO) Montreal Center App/Dep Con 125.9 308.3 MF 118.5 (1030–0325Z‡ 5 NM to 4000′)	H–11B
Vancouver Intl, BC (CYVR) ATIS 124.6 124.75 App Con 128.6 128.17 352.7 (Outer) 133.1 134.225 352.7 (Inner) Dep Con 126.125 (north) 132.3 (south) 363.8 Tower 118.7 (south) 119.55 (north) VFR 124.0 125.65 226.5 236.6 Gnd Con 121.7 (south) 127.15 (north) 275.8 Clnc Del 121.4	H–1B, L–1E

FACILITY NAME	CHART & PANEL
Victoria Intl, BC (CYYJ) ATIS 118.8 (1400–0800Z‡) App Con 125.95 308.4 Dep Con 133.85 308.4 Tower 119.1 (Outer) 119.7 (Inner) 239.6 Gnd Con 121.9 361.4 (1400–0800Z‡ OT ctc Kamloops 119.7) Clnc Del 126.4 (1400–0800Z‡)	H–1B, L–1E
Victoriaville, QC (CSR3) Montreal Center App Con 132.35	L–32H
Waterville/Kings Co Muni, NS (CCW3) Greenwood Trml App/Dep Con 120.6 335.9 Greenwood Tower 119.5 324.3	L–32J
Wiarton, ON (CYVV) Toronto Center App/Dep Con 132.575 MF 122.2 (5 NM to 3700′)	H–11B, L–31D
Windsor, ON (CYQG) ATIS 134.5 (1130–0330Z‡) Detroit App/Dep Con 126.85 127.5 134.3 348.3 363.2 Tower 124.7 (1130–0330Z‡) Gnd Con 121.7 MF 124.7 (0330–1130Z‡ 6 NM irregular shape to below 3000′) VFR Advisory Detroit App Con 134.3	H–10G, L–8J
Yarmouth, NS (CYQI) Moncton Center App/Dep Con 123.9 368.5 MF 123.0 (5 NM to 3100′)	H–11E, L–32I

MEXICO

FACILITY NAME	CHART & PANEL
Abraham Gonzalez Intl (MMCS) Juarez App Con 119.9 Juarez Tower 118.9	H–4K, L–6F
Del Norte Intl (MMAN) ATIS 127.55 (1300–0300Z‡) Monterrey App 119.75 120.4 Tower 118.6	H–7B, L–20G
Durango Intl (MMDO) ATIS 132.1 Tower 118.1 Durango Info 122.3	H–7A
General Abelardo L Rodriguez Intl (MMTJ) ATIS 127.9 Tijuana App Con 119.5 120.3 Tijuana Tower 118.1 Clnc Del 122.35 Tijuana Info 132.1	H–4H, L–4H
General Lucio Blanco Intl (MMRX) Reynosa App Con 118.8 Reynosa Tower 118.8	H–7B, L–20H
General Mariano Escobedo Intl (MMMY) ATIS 127.7 Monterrey App Con 119.75 120.4 Monterrey Tower 118.1 Gnd Con 121.9	H–7B, L–20G
General R Fierro Villalobos Intl (MMCU) ATIS 127.9 Chihuahua App Con 121.0 Chihuahua Tower 118.4	L–6I
General Rodolfo Sanchez Taboada Intl (MMML) ATIS 127.6 Mexicali App Con 118.2 Mexicali Tower 118.2 Mexicali Info 123.9 122.3	H–4H, L–4J, 5A
General Servando Canales Intl (MMMA) Matamoros App Con 118.0 Matamoros Tower 118.0	H–7C, L–21A
Plan De Guadalupe Intl (MMIO) Saltillo App Con 127.4 Saltillo Tower 118.4	H–7B
Quetzalcoatl Intl (MMNL) Nuevo Laredo App Con 118.3 Nuevo Laredo Tower 118.3	H–7B, L–20G
Torreon Intl (MMTC) App Con 119.6 Tower 118.5	H–7A

INTENTIONALLY
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In support of the Federal Aviation Administration's Runway Incursion Program, selected towered airport diagrams have been published in the Airport Diagram section of the A/FD. Diagrams will be listed alphabetically by associated city and airport name. Airport diagrams, depicting runway and taxiway configurations, will assist both VFR and IFR pilots in ground taxi operations. The airport diagrams in this publication are the same as those published in the U.S. Terminal Procedures Publications. For additional airport diagram legend information see the U.S. Terminal Procedures Publication.

NOTE: Some text data published under the individual airport in the front portion of the A/FD may be more current than the data published on the Airport Diagrams. The airport diagrams are updated only when significant changes occur.

GENERAL INFORMATION

PILOT CONTROLLED AIRPORT LIGHTING SYSTEMS

Available pilot controlled lighting (PCL) systems are indicated as follows:

1. Approach lighting systems that bear a system identification are symbolized using negative symbology, e.g., (A1), (V), (✿)
2. Approach lighting systems that do not bear a system identification are indicated with a negative "(L)" beside the name.

A star (★) indicates non-standard PCL, consult the individual airport in the front portion of the A/FD, e.g., (L★)

To activate lights use frequency indicated in the communication section of the chart with a (L) or the appropriate lighting system identification e.g., UNICOM 122.8 (L), (A1), (V)

KEY MIKE	FUNCTION
7 times within 5 seconds	Highest intensity available
5 times within 5 seconds	Medium or lower intensity (Lower REIL or REIL-off)
3 times within 5 seconds	Lowest intensity available (Lower REIL or REIL-off)

CHART CURRENCY INFORMATION

FAA procedure amendment number → Amdt 11A 99365 → Date of latest change
FAA procedure amendment number → Orig 00365 → Date of latest change

The Chart Date indentifies the Julian date the chart was added to the volume or last revised for any reason. The first two digits indicate the year, the last three digits indicate the day of the year (001 to 365/6) in which the latest addition or change was first published.

The Procedure Amendment Number precedes the Chart Date, and changes any time instrument information (e.g., DH, MDA, approach routing, etc.) changes. Procedure changes also cause the Chart Date to change.

MISCELLANEOUS

★ Indicates a non-continuously operating facility, see the individual airport in the front portion of the A/FD.
Indicates control tower temporarily closed UFN.

10042
LEGEND

INSTRUMENT APPROACH PROCEDURES (CHARTS)

AIRPORT DIAGRAM/AIRPORT SKETCH

Runways

Hard Surface | Other Than Hard Surface | Stopways, Taxiways, Parking Areas, Water Runways | Displaced Threshold

Closed Runway | Closed Taxiway | Under Construction | Metal Surface

ARRESTING GEAR: Specific arresting gear systems; e.g., BAK12, MA-1A etc., shown on airport diagrams, not applicable to Civil Pilots. Military Pilots refer to appropriate DOD publications.

uni-directional | bi-directional | Jet Barrier

ARRESTING SYSTEM

REFERENCE FEATURES

Buildings
Tanks
Obstructions
Airport Beacon #
Runway
Radar Reflectors
Control Tower #
Hot Spot

When Control Tower and Rotating Beacon are co-located, Beacon symbol will be used and further identified as TWR.

Runway length depicted is the physical length of the runway (end-to-end, including displaced thresholds if any) but excluding areas designated as stopways.

A D symbol is shown to indicate runway declared distance information available, see appropriate A/FD, Alaska or Pacific Supplement for distance information.

Helicopter Alighting Areas

Negative Symbols used to identify Copter Procedures

landing point

Runway Threshold elevation.....THRE 123
Runway TDZ elevation.....TDZE 123
Runway Slope.....0.3% DOWN / 0.8% UP
(shown when runway slope is greater than or equal to 0.3%)

NOTE:
Runway Slope measured to midpoint on runways 8000 feet or longer.

U.S. Navy Optical Landing System (OLS) "OLS" location is shown because of its height of approximately 7 feet and proximity to edge of runway may create an obstruction for some types of aircraft.

Approach light symbols are shown in the Flight Information Handbook.

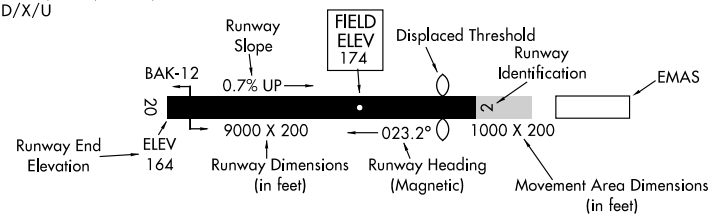
Airport diagram scales are variable.

True/magnetic North orientation may vary from diagram to diagram

Coordinate values are shown in 1 or ½ minute increments. They are further broken down into 6 second ticks, within each 1 minute increments.

NOTE:
All new and revised airport diagrams are shown referenced to the World Geodetic System (WGS) (noted on appropriate diagram), and may not be compatible with local coordinates published in FLIP. (Foreign Only)

Runway Weight Bearing Capacity/or PCN Pavement Classification Number is shown as a codified expression.
Refer to the appropriate Supplement/Directory for applicable codes e.g.,
RWY 14-32 S75, T185, ST175, TT325
PCN 80 F/D/X/U



SCOPE

Airport diagrams are specifically designed to assist in the movement of ground traffic at locations with complex runway/taxiway configurations and provide information for updating Computer Based Navigation Systems (I.E., INS, GPS) aboard aircraft. Airport diagrams are not intended to be used for approach and landing or departure operations. For revisions to Airport Diagrams: Consult FAA Order 7910.4.

HOT SPOTS

An ''Airport surface hot spot'' is a location on an aerodrome movement area with a history or potential risk of collision or runway incursion, and where heightened attention by pilots/drivers is necessary.

A ''hot spot'' is a runway safety related problem area on an airport that presents increased risk during surface operations. Typically it is a complex or confusing taxiway/taxiway or taxiway/runway intersection. The area of increased risk has either a history of or potential for runway incursions or surface incidents, due to a variety of causes, such as but not limited to: airport layout, traffic flow, airport marking, signage and lighting, situational awareness, and training. Hot spots are depicted on airport diagrams as open circles or polygons designated as ''HOT[1]'', ''HOT[2]'', etc. and tabulated in the list below with a brief description of each hot spot. Hot spots will remain charted on airport diagrams until such time the increased risk has been reduced or eliminated.

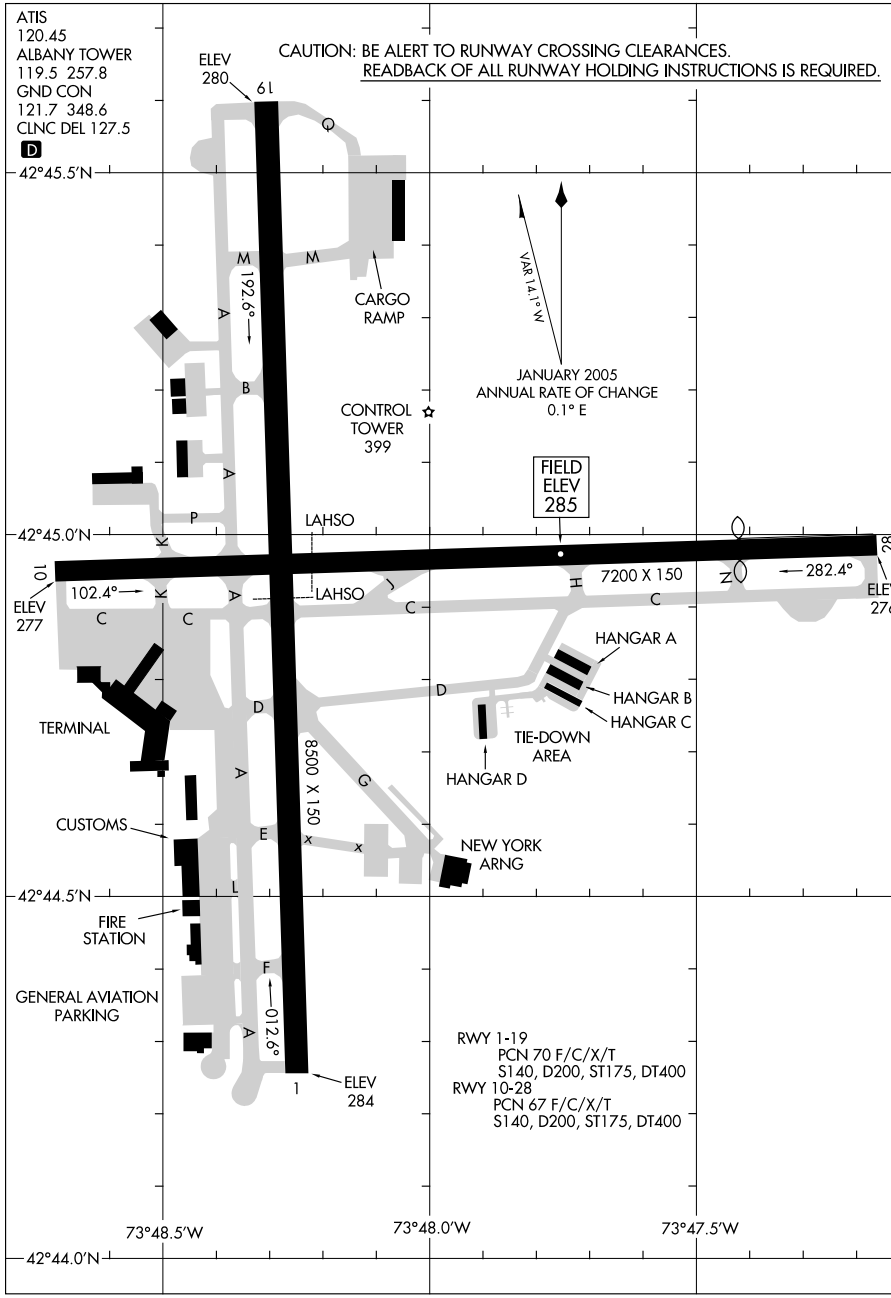
CITY/AIRPORT	HOT SPOT	DESCRIPTION
MARYLAND		
BALTIMORE		
BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL (BWI)	HOT[1]	Uncontrolled stop bar. No crossing allowed.
	HOT[2]	Caution Rwy 10–28 in close proximity to Twy P1 intersection.
	HOT[3]	Twy E closed and barricaded.
NEW JERSEY		
CALDWELL		
ESSEX CO (CDW)	HOT[1]	Pilots taxiing to Rwy 28 northbound on Twy P should exercise caution at intersection of Twy P and Twy N due to close proximity to Rwy 28.
NEW YORK		
ROCHESTER		
GREATER ROCHESTER INTL (ROC)	HOT[1]	Be alert during ldg/tkf Rwy 25 and Rwy 28 thlds in close proximity to each other.
	HOT[2]	Do not cross Rwy 10–28 without specific ATC clearance.
PENNSYLVANIA		
HARRISBURG		
CAPITAL CITY (CXY)	HOT[1]	Rwy 26 LAHSO pavement marking is difficult to see in late afternoon due to sun.
	HOT[2]	Rwy 8 ILS Critical Area hold line pavement marking is non–standard.
	HOT[3]	Twy C at Rwy 30 – Entrance to Twy B is difficult to see from Twy C due to large pavement area.

09183

AIRPORT DIAGRAM

AL-10 (FAA)

ALBANY INTL (ALB)
ALBANY, NEW YORK



AIRPORT DIAGRAM

09183

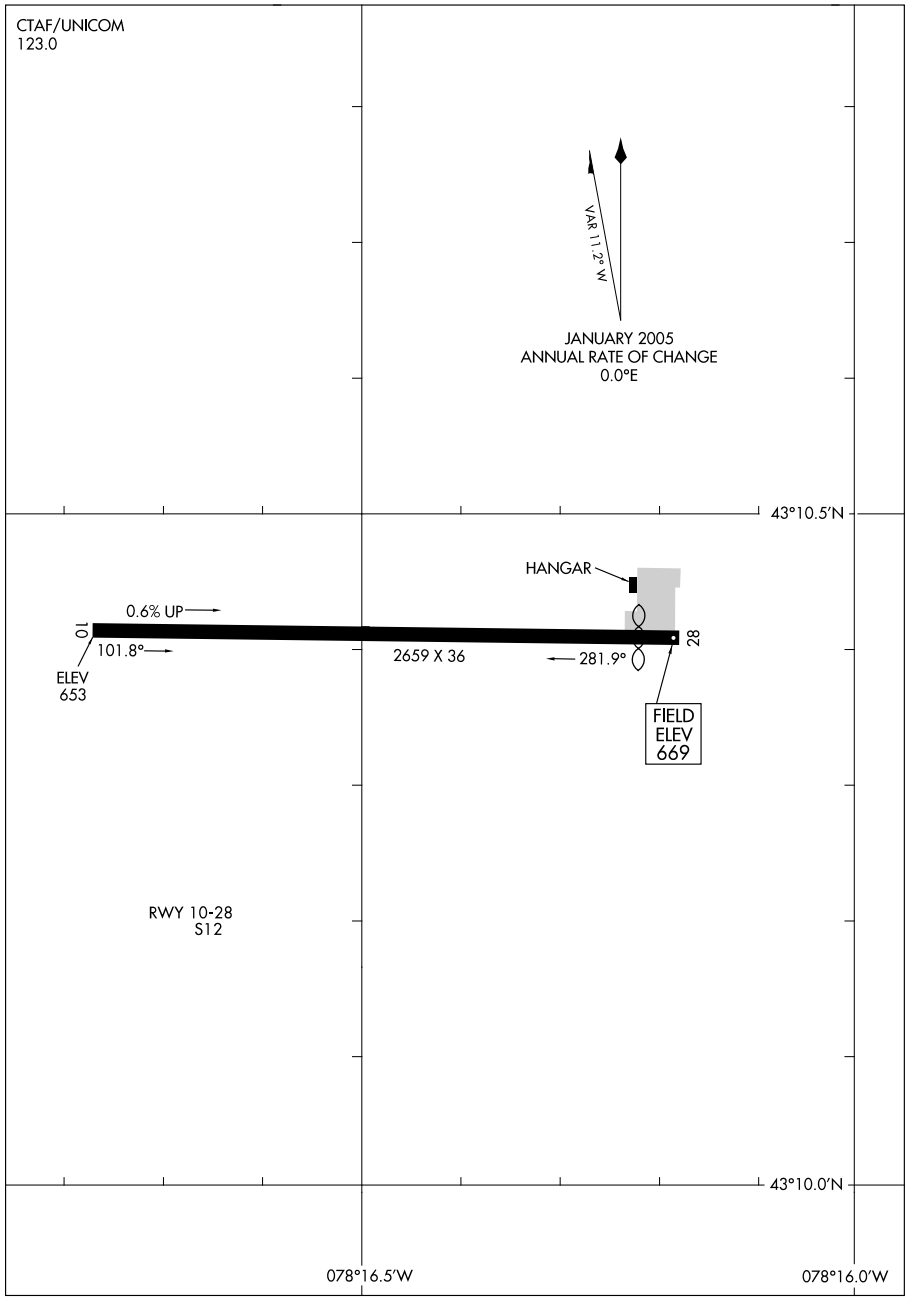
ALBANY, NEW YORK
ALBANY INTL (ALB)

09071

AIRPORT DIAGRAM

AL-6495 (FAA)

ALBION/PINE HILL (9G6)
ALBION, NEW YORK



AIRPORT DIAGRAM
09071

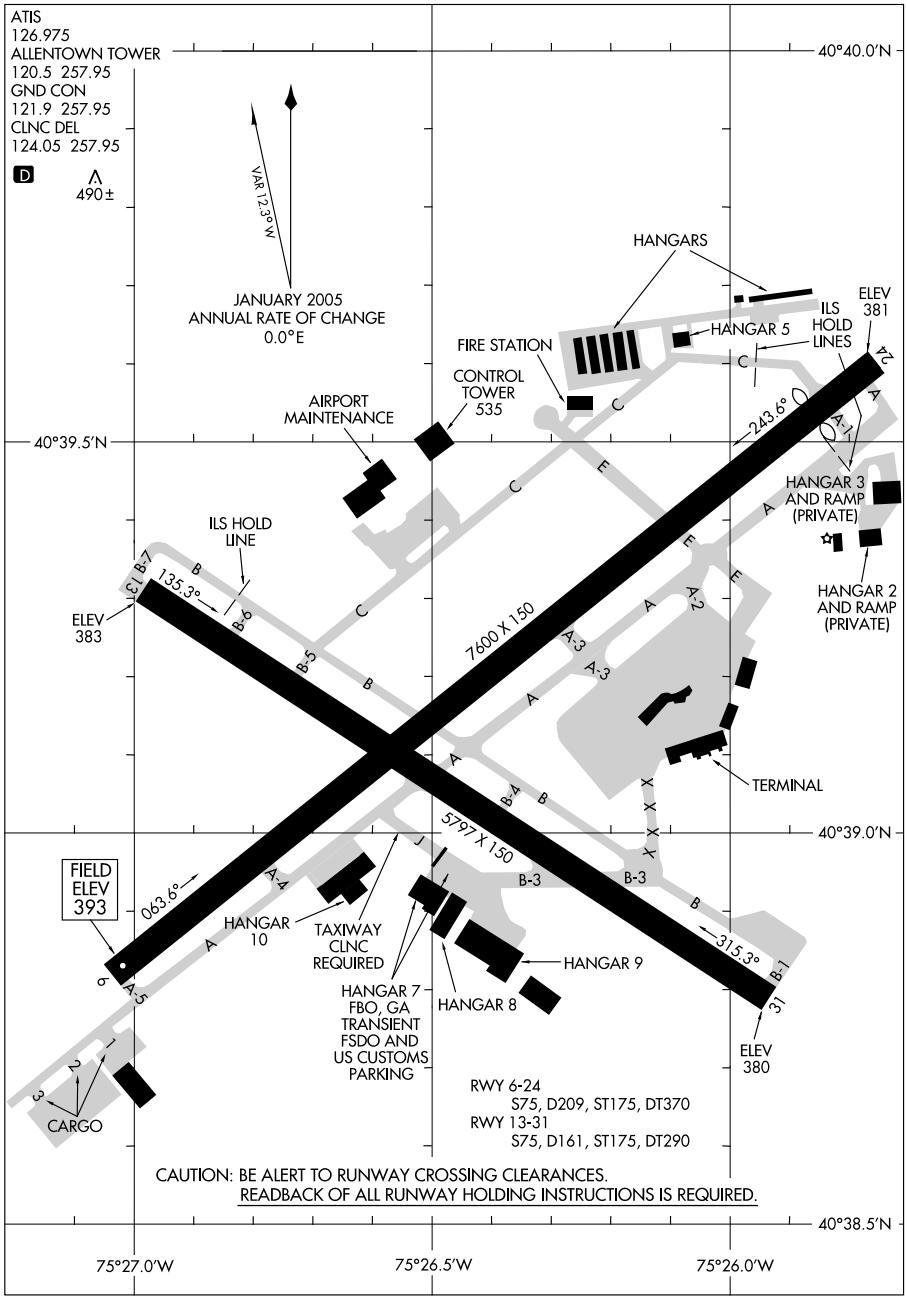
ALBION, NEW YORK
ALBION/PINE HILL (9G6)

09239

AIRPORT DIAGRAM

AL-15 (FAA)

ALLENTOWN / LEHIGH VALLEY INTL (ABE)
ALLENTOWN, PENNSYLVANIA



AIRPORT DIAGRAM

09239

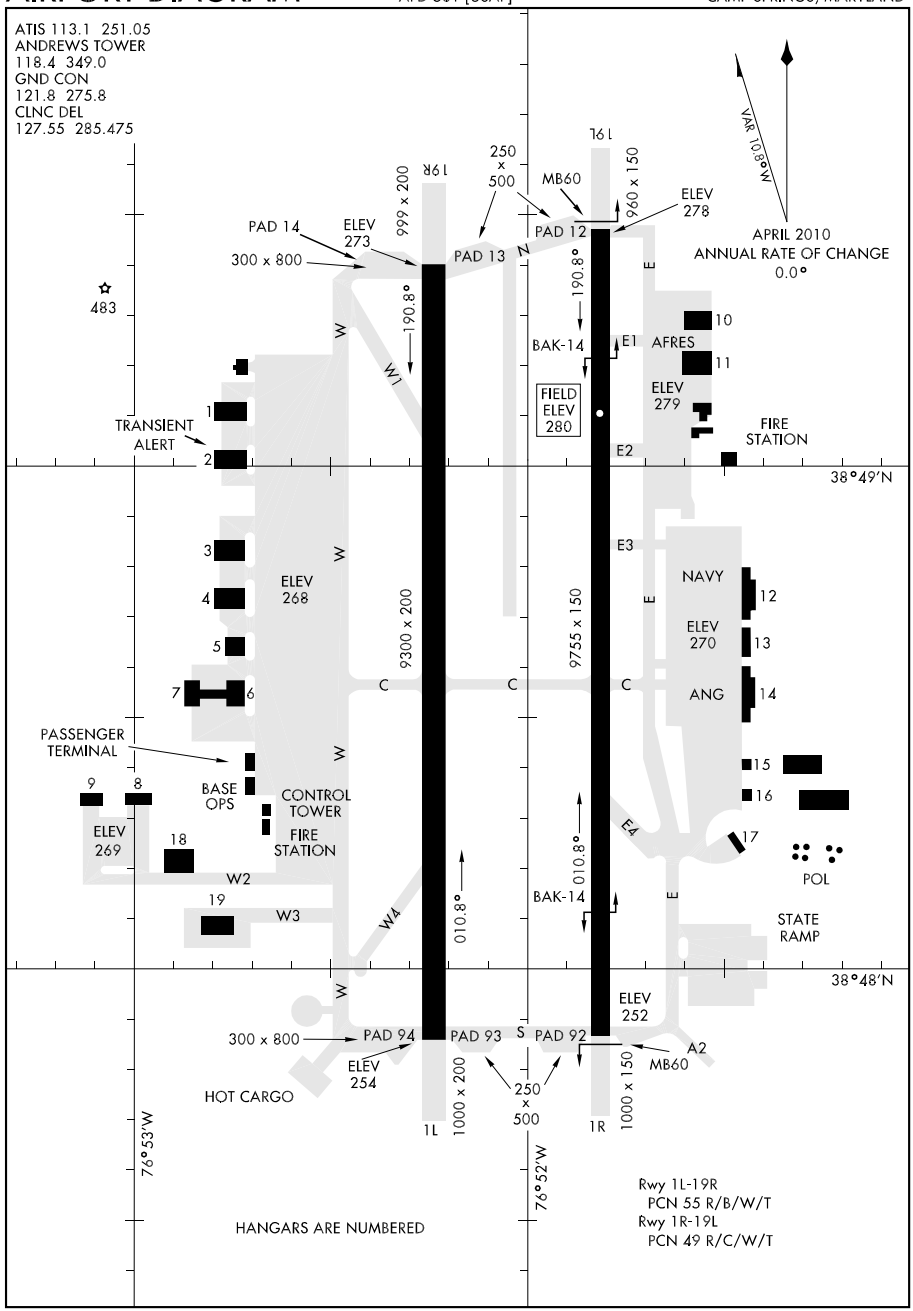
ALLENTOWN, PENNSYLVANIA
ALLENTOWN / LEHIGH VALLEY INTL (ABE)

10098

AIRPORT DIAGRAM

AFD-561 [USAF]

ANDREWS AFB (KADW)
CAMP SPRINGS, MARYLAND



AIRPORT DIAGRAM

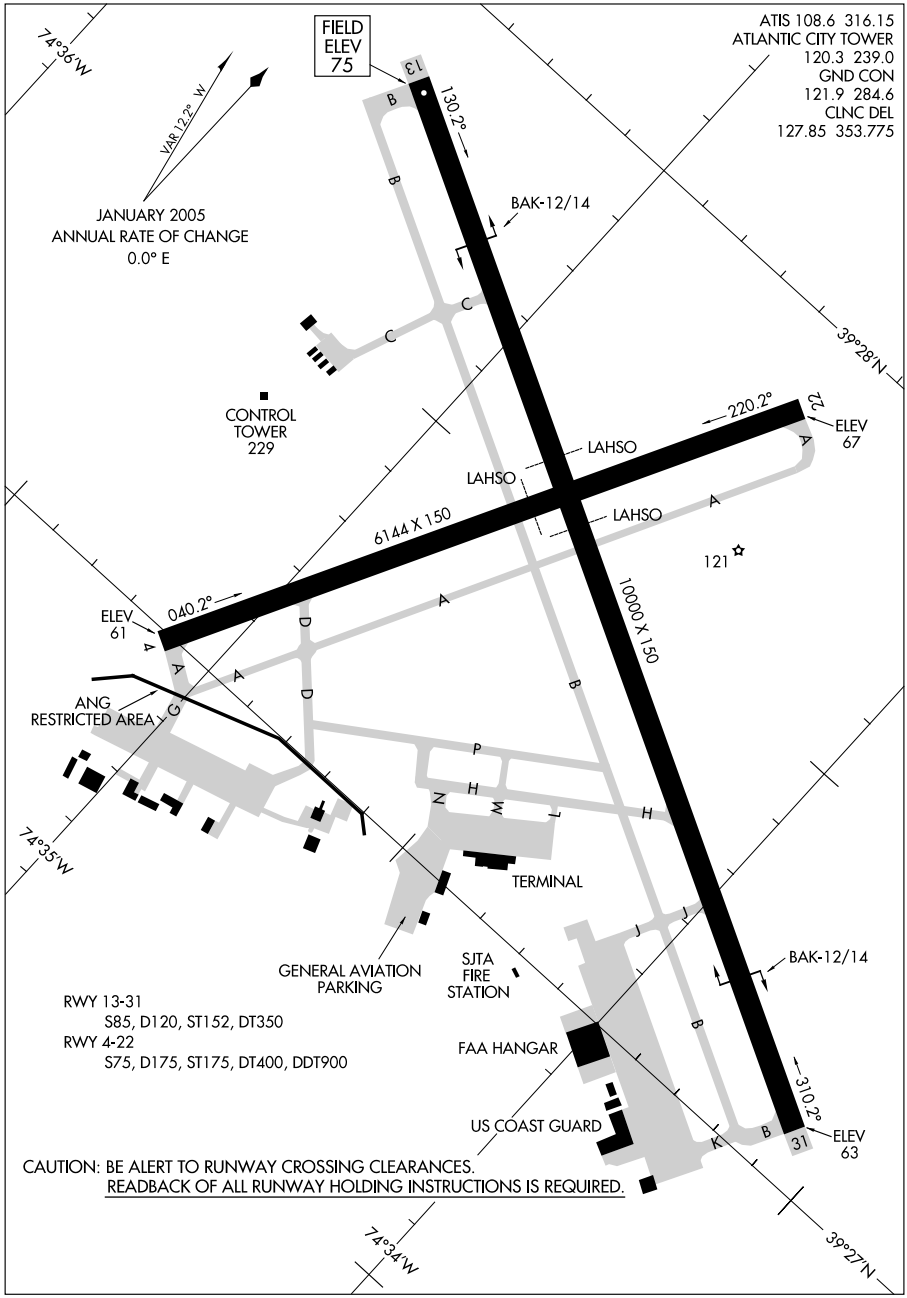
CAMP SPRINGS, MARYLAND
ANDREWS AFB (KADW)

08269

AIRPORT DIAGRAM

AL-669 (FAA)

ATLANTIC CITY INTL (ACY)
ATLANTIC CITY, NEW JERSEY



AIRPORT DIAGRAM

08269

ATLANTIC CITY, NEW JERSEY
ATLANTIC CITY INTL (ACY)

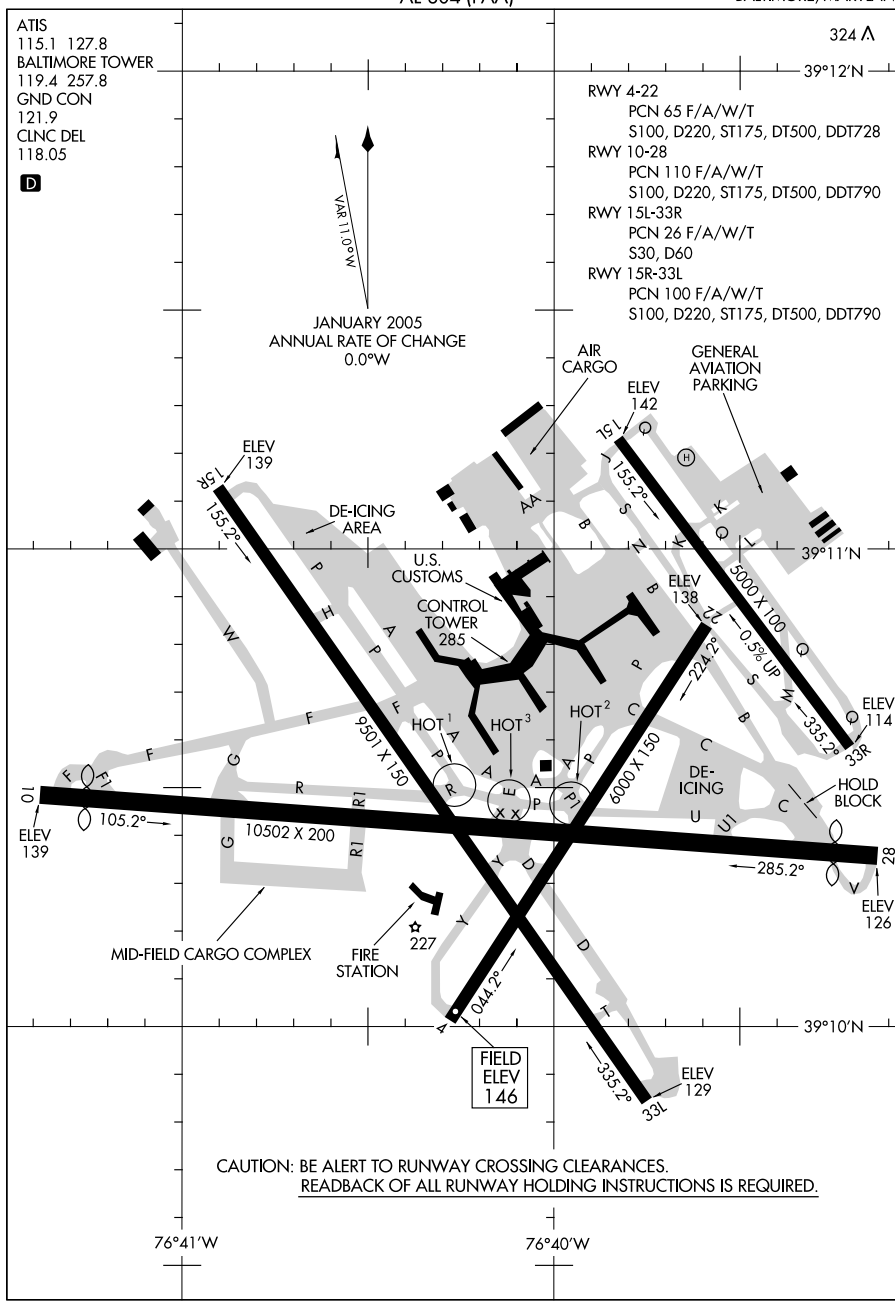
10042

AIRPORT DIAGRAM

BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL (BWI)

AL-804 (FAA)

BALTIMORE, MARYLAND



AIRPORT DIAGRAM

10042

BALTIMORE, MARYLAND

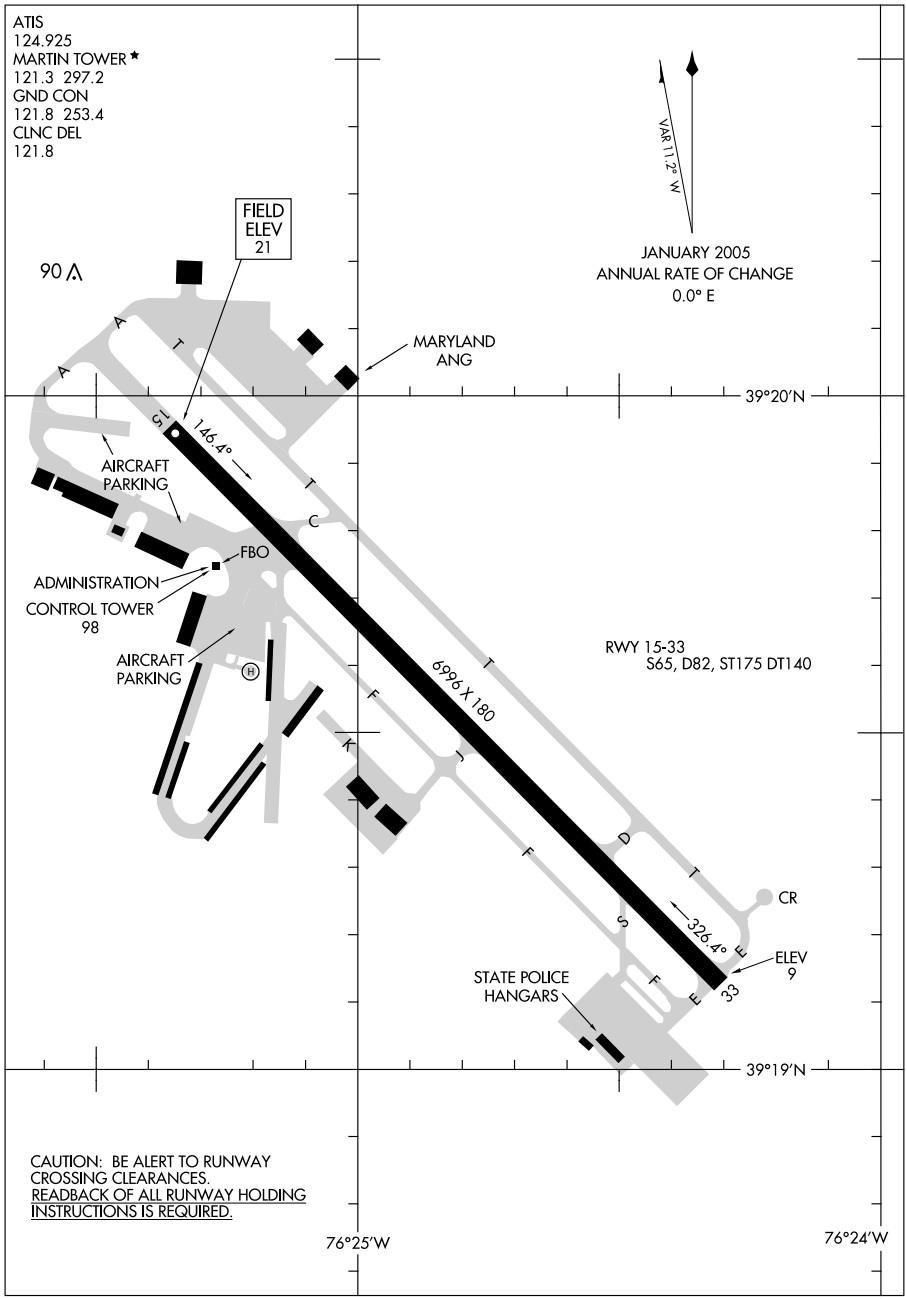
BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL (BWI)

09295

AIRPORT DIAGRAM

AL-5222 (FAA)

BALTIMORE/MARTIN STATE (MTN)
BALTIMORE, MARYLAND



AIRPORT DIAGRAM

09295

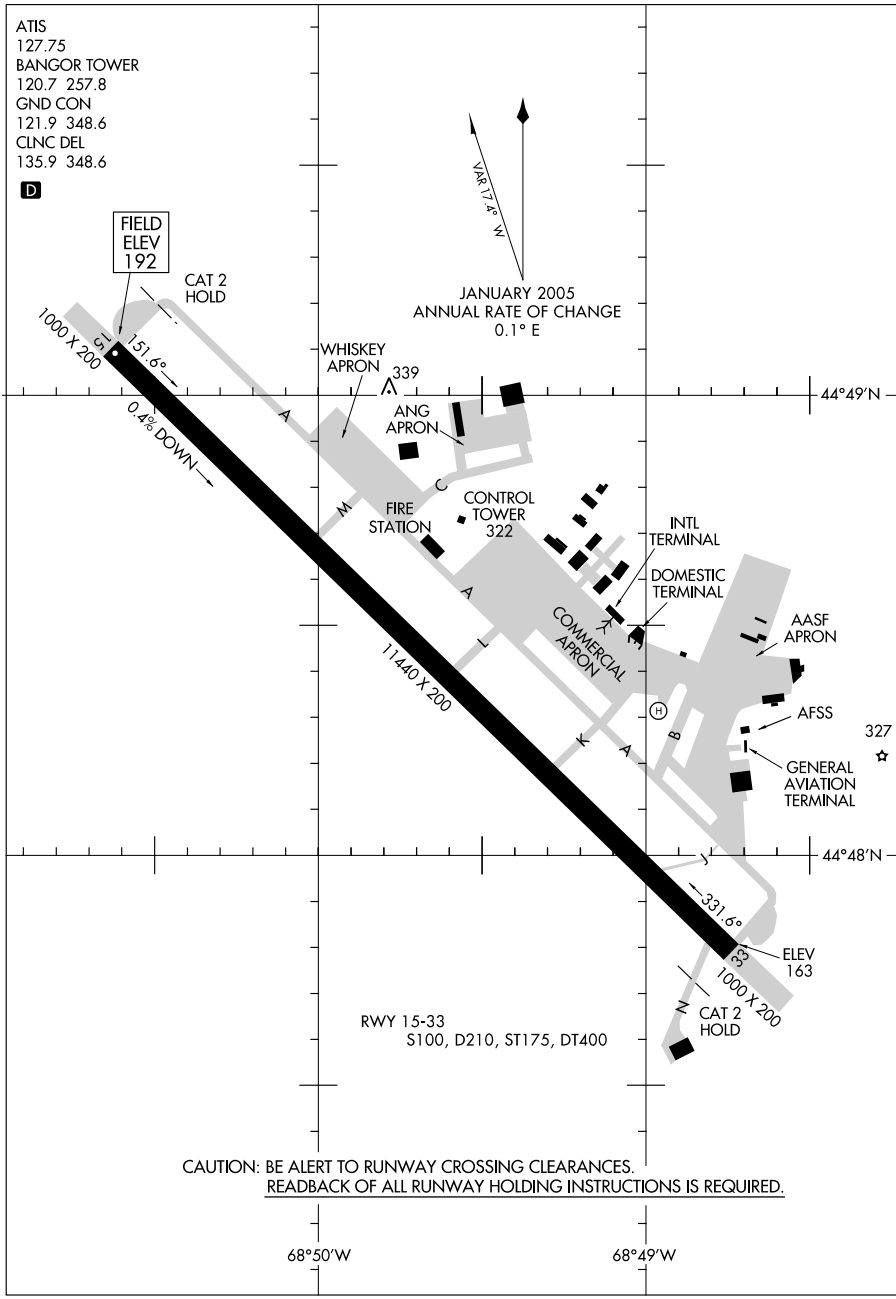
BALTIMORE, MARYLAND
BALTIMORE/MARTIN STATE (MTN)

09295

AIRPORT DIAGRAM

AL-39 (FAA)

BANGOR INTL (BGR)
BANGOR, MAINE



AIRPORT DIAGRAM
09295

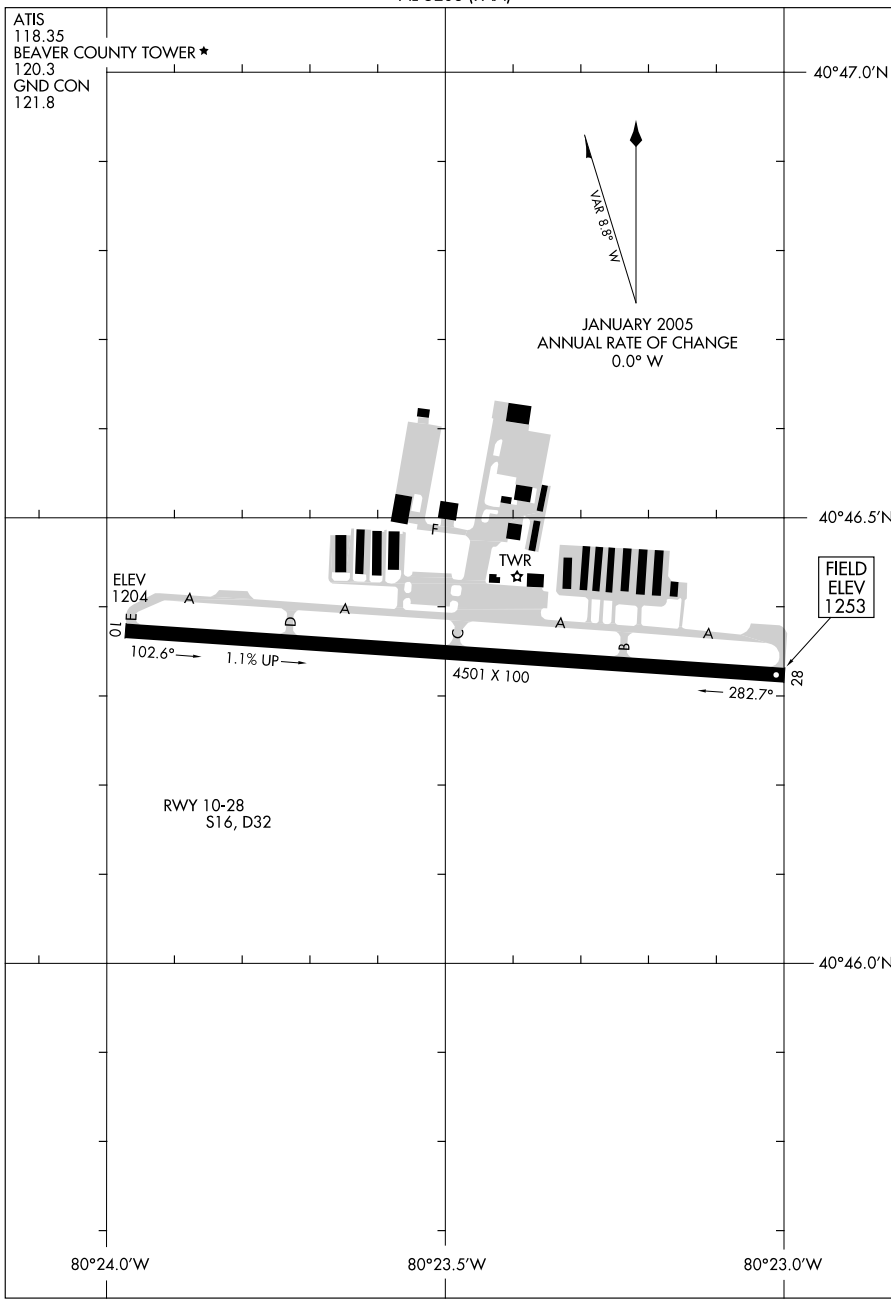
BANGOR, MAINE
BANGOR INTL (BGR)

09295

AIRPORT DIAGRAM

AL-5206 (FAA)

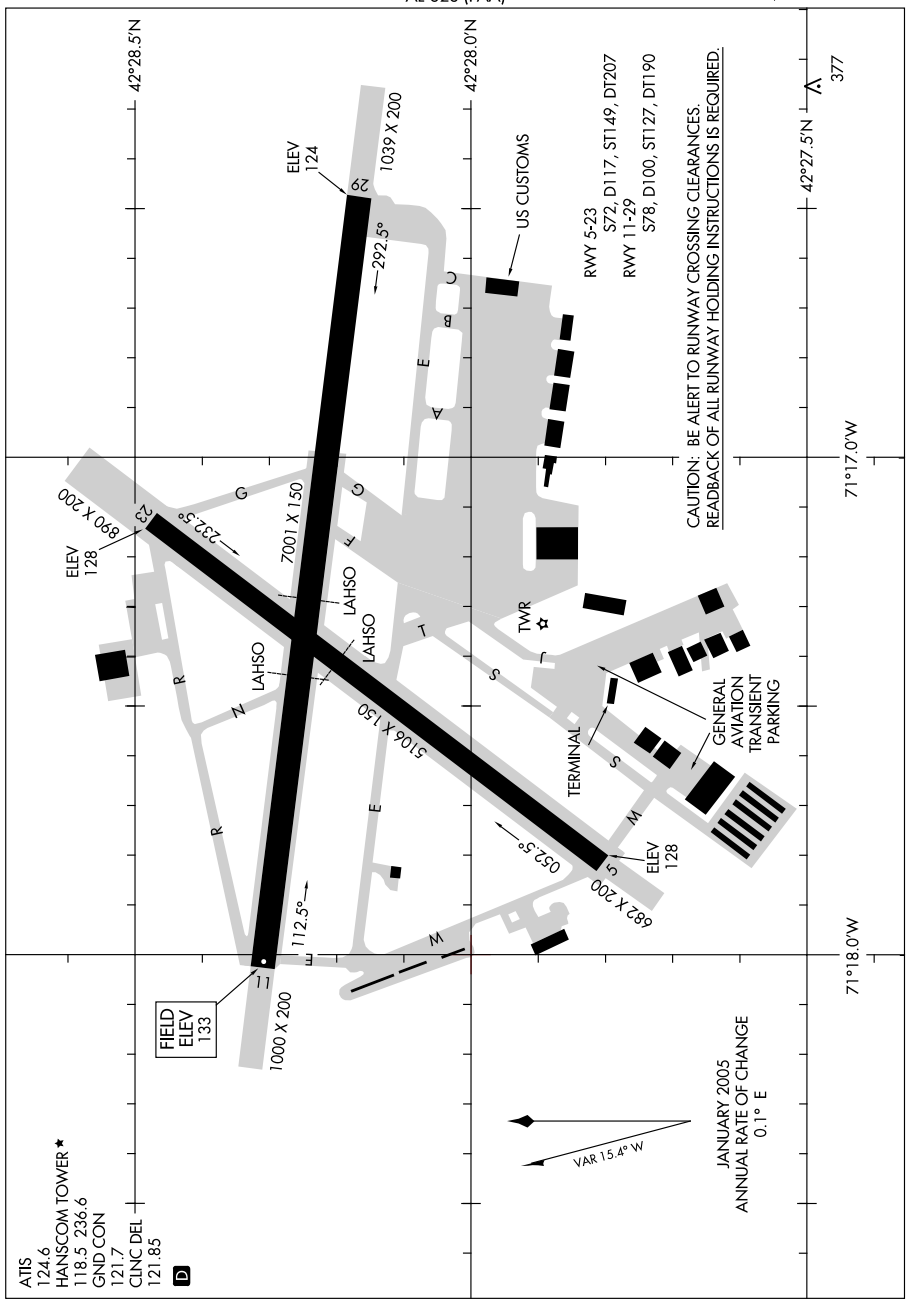
BEAVER FALLS/ BEAVER COUNTY (BVI)
BEAVER FALLS, PENNSYLVANIA



AIRPORT DIAGRAM

09295

BEAVER FALLS, PENNSYLVANIA
BEAVER FALLS/BEAVER COUNTY (BVI)

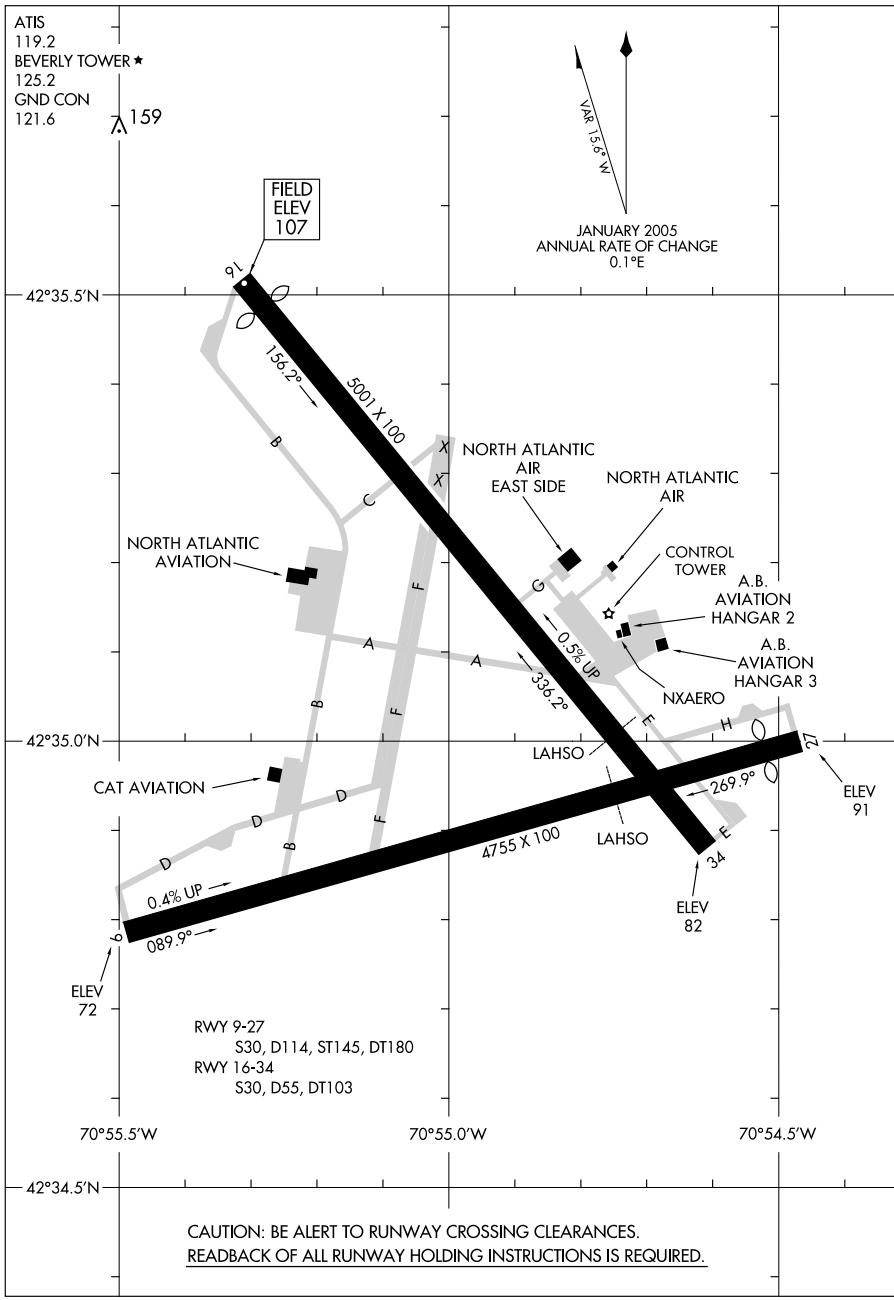

10098
AIRPORT DIAGRAM
BEDFORD / LAURENCE G. HANSCOM FIELD (BED)
BEDFORD, MASSACHUSETTS
AL-626 (FAA)
42°28.5'N
42°28.0'N
42°27.5'N
71°17.0'W
71°18.0'W
ELEV 124
29
1039 X 200
292.5°
US CUSTOMS
RWY 5-23
S72, D117, ST149, DT207
RWY 11-29
S78, D100, ST127, DT190
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
377
ELEV 128
23
890 X 200
232.5°
7001 X 150
LAHSO
LAHSO
LAHSO
TWR
5106 X 150
052.5°
682 X 200
ELEV 128
TERMINAL
GENERAL AVIATION TRANSIENT PARKING
112.5°
11
1000 X 200
FIELD ELEV 133
VAR 15.4° W
JANUARY 2005
ANNUAL RATE OF CHANGE
0.1° E
ATIS
124.6
HANSCOM TOWER *
118.5 236.6
GND CON
121.7
CLNC DEL
121.85
D
AIRPORT DIAGRAM
10098
BEDFORD, MASSACHUSETTS
BEDFORD / LAURENCE G. HANSCOM FIELD (BED)

09015

AIRPORT DIAGRAM

AL-5039 (FAA)

BEVERLY MUNI (BVY)
BEVERLY, MASSACHUSETTS



AIRPORT DIAGRAM

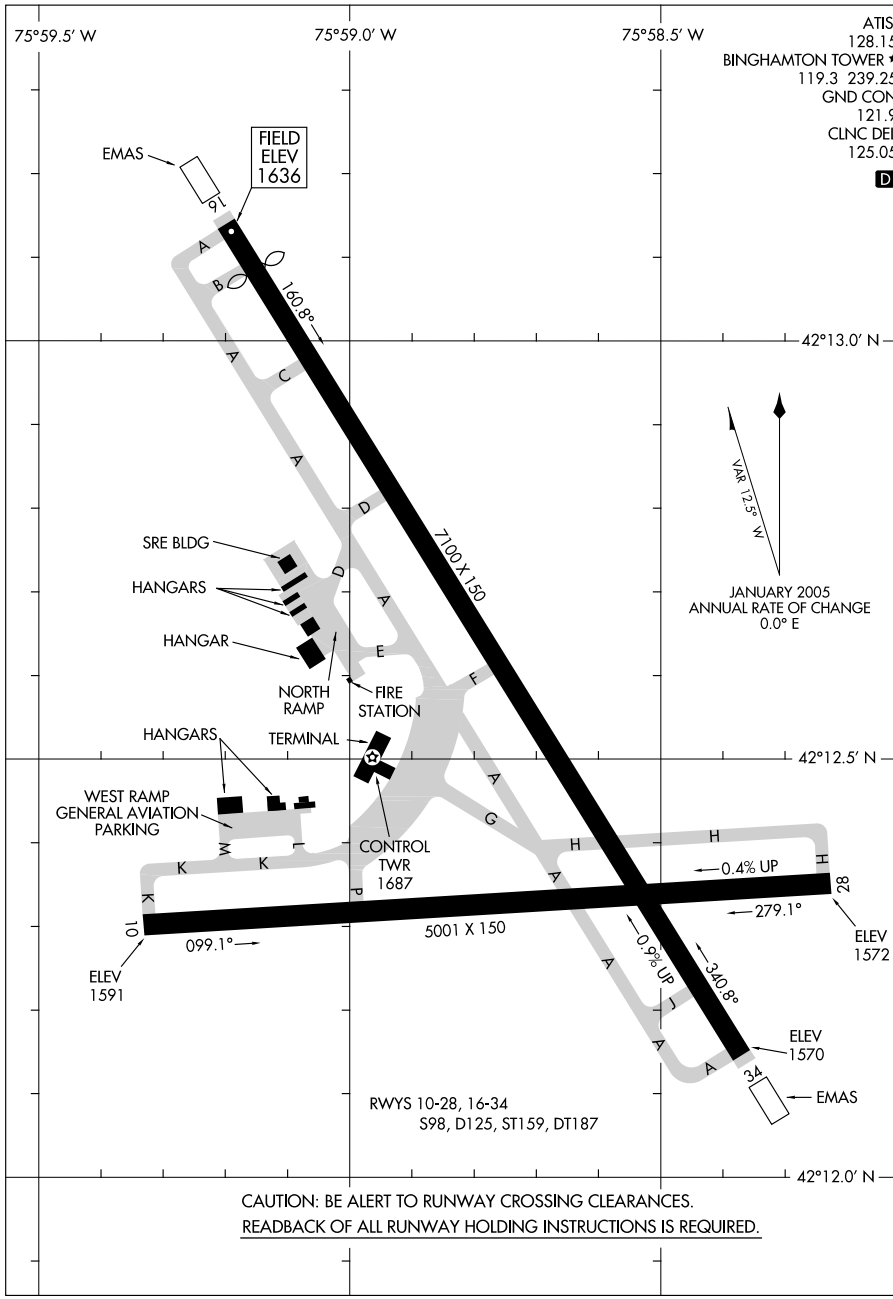
09015

BEVERLY, MASSACHUSETTS
BEVERLY MUNI (BVY)

10042

AIRPORT DIAGRAM

BINGHAMTON/ GREATER BINGHAMTON/EDWIN A. LINK FIELD (BGM)
AL-20 (FAA)
BINGHAMTON, NEW YORK



AIRPORT DIAGRAM

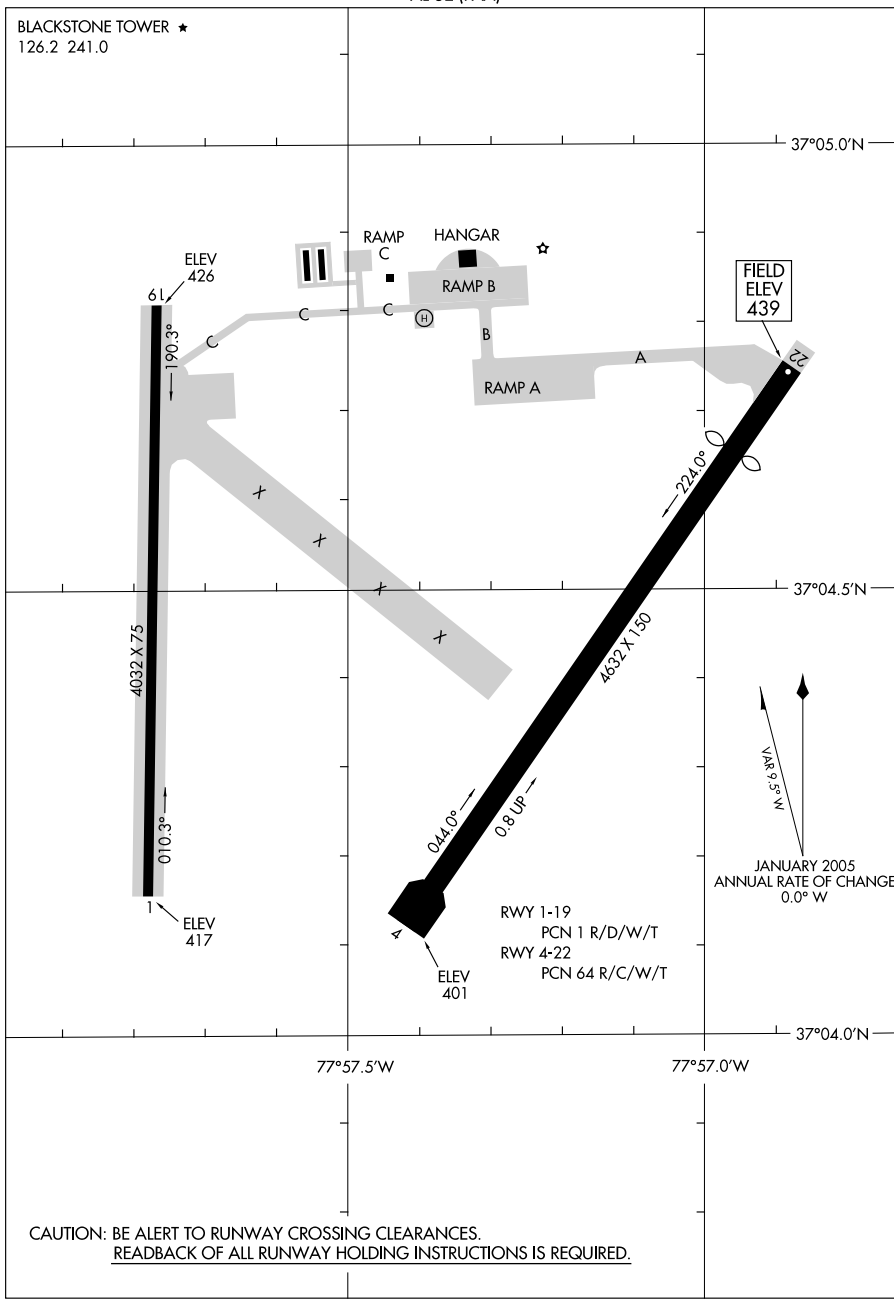
BINGHAMTON, NEW YORK
BINGHAMTON/ GREATER BINGHAMTON/EDWIN A. LINK FIELD (BGM)

10042

09015

AIRPORT DIAGRAM

BLACKSTONE/ALLEN C. PERKINSON/BAAF (BKT)
BLACKSTONE, VIRGINIA
AL-52 (FAA)



CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

AIRPORT DIAGRAM

BLACKSTONE, VIRGINIA
BLACKSTONE/ALLEN C. PERKINSON/BAAF (BKT)

09015

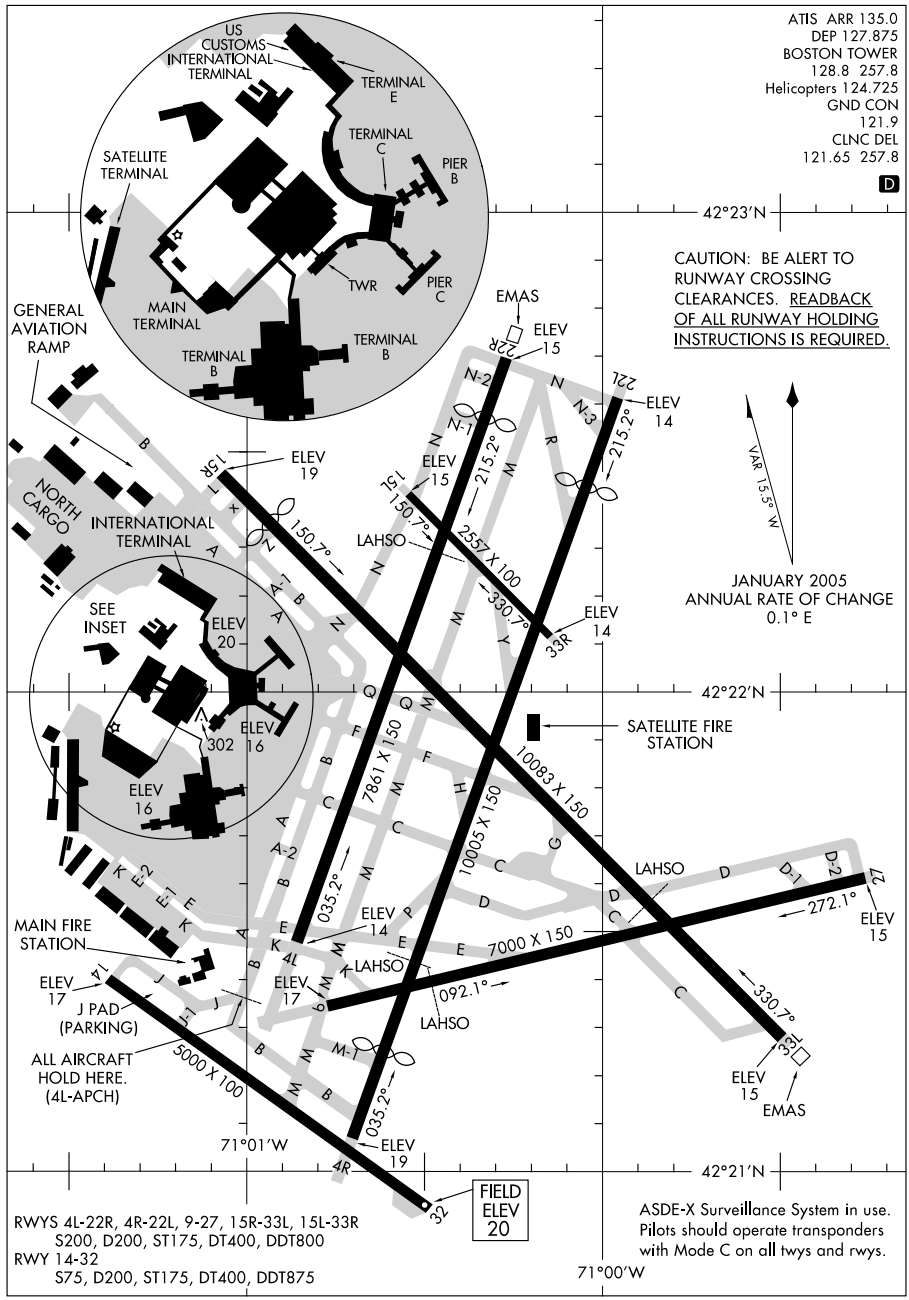
10154

AIRPORT DIAGRAM

BOSTON / GENERAL EDWARD LAWRENCE LOGAN INTL (BOS)

AL-58 (FAA)

BOSTON, MASSACHUSETTS



AIRPORT DIAGRAM

10154

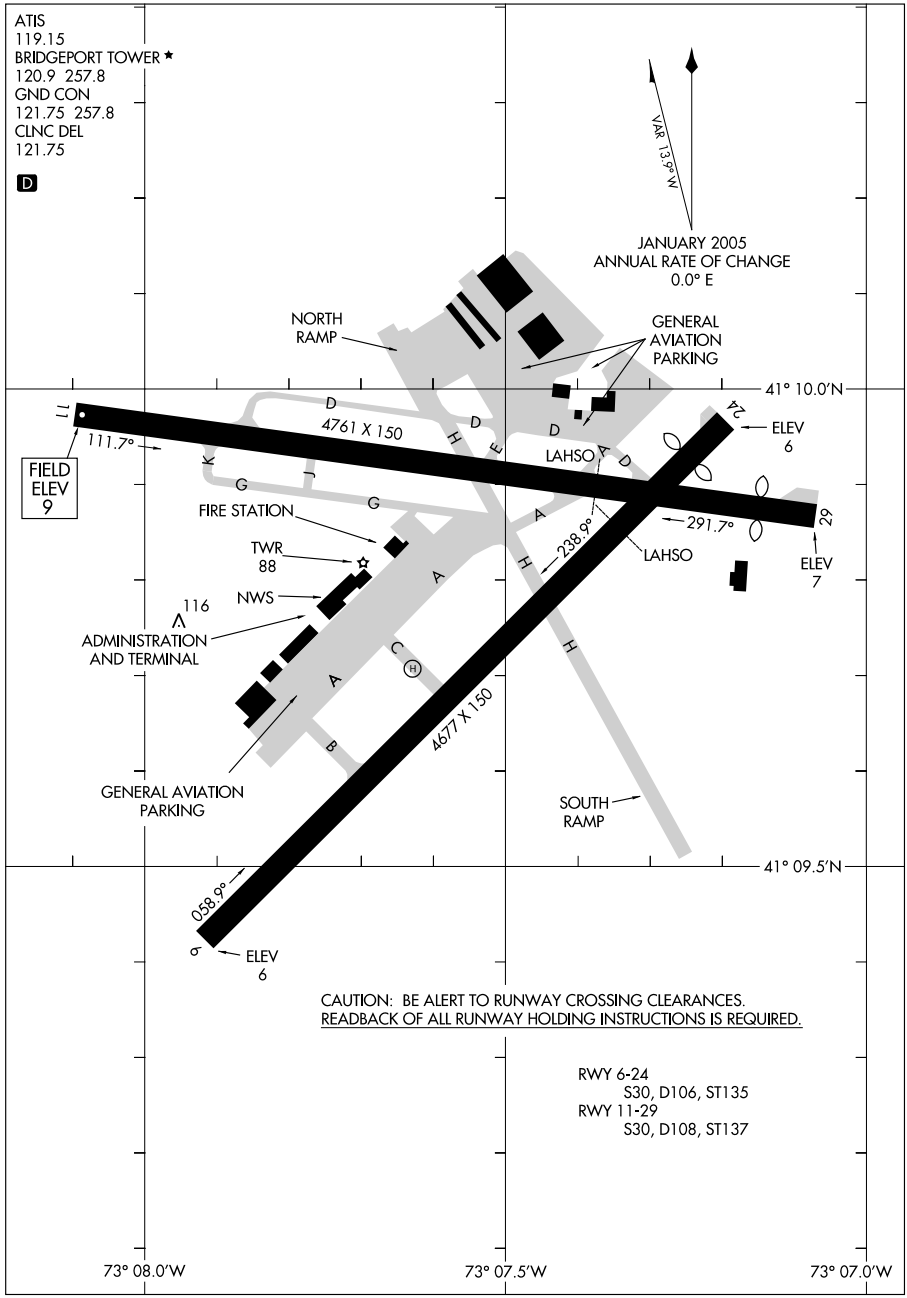
BOSTON, MASSACHUSETTS

BOSTON / GENERAL EDWARD LAWRENCE LOGAN INTL (BOS)

10098

AIRPORT DIAGRAM

BRIDGEPORT / IGOR I. SIKORSKY MEMORIAL (BDR)
AL-621 (FAA)
BRIDGEPORT, CONNECTICUT



AIRPORT DIAGRAM
10098

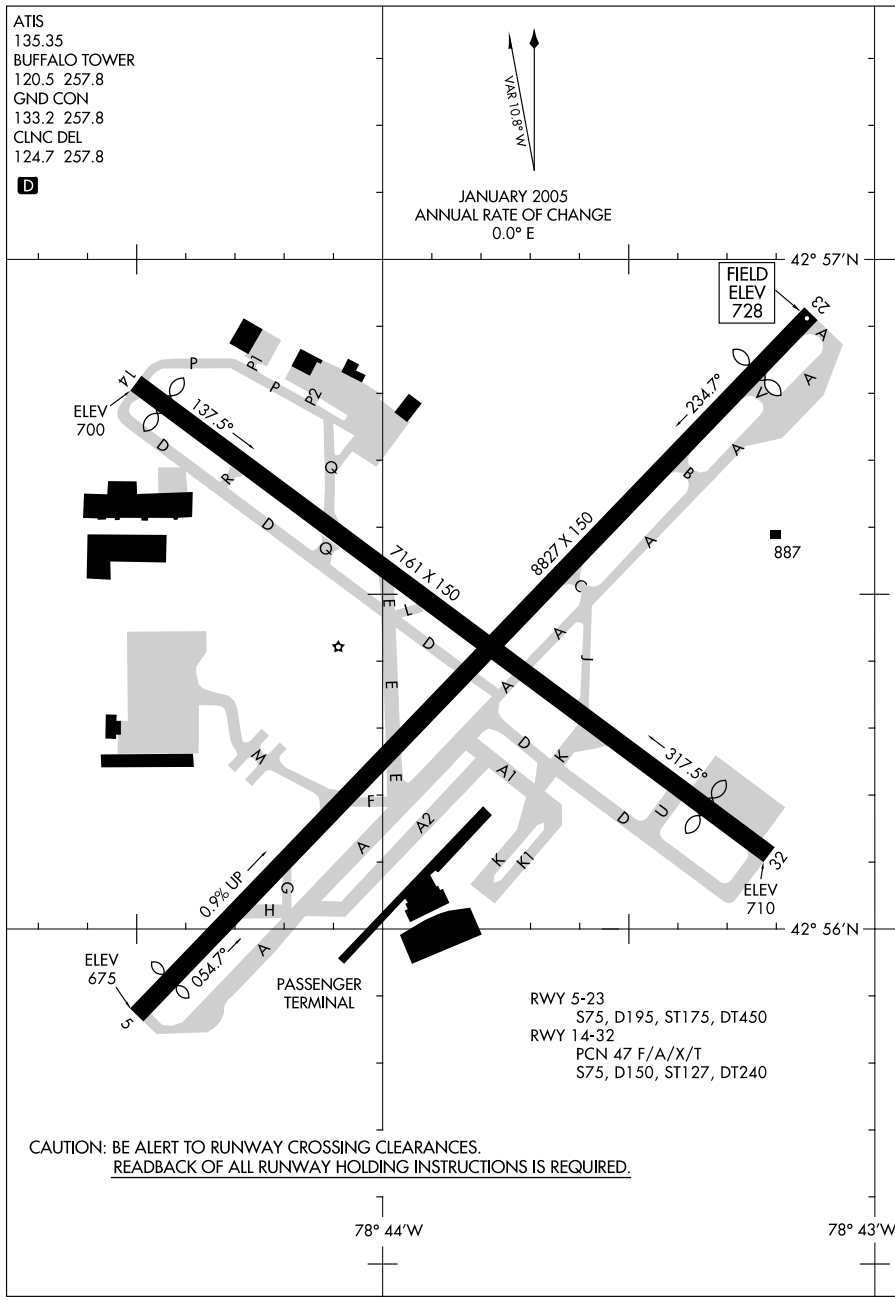
BRIDGEPORT, CONNECTICUT
BRIDGEPORT / IGOR I. SIKORSKY MEMORIAL (BDR)

09239

AIRPORT DIAGRAM

AL-65 (FAA)

BUFFALO NIAGARA INTL (BUF)
BUFFALO, NEW YORK



AIRPORT DIAGRAM
09239

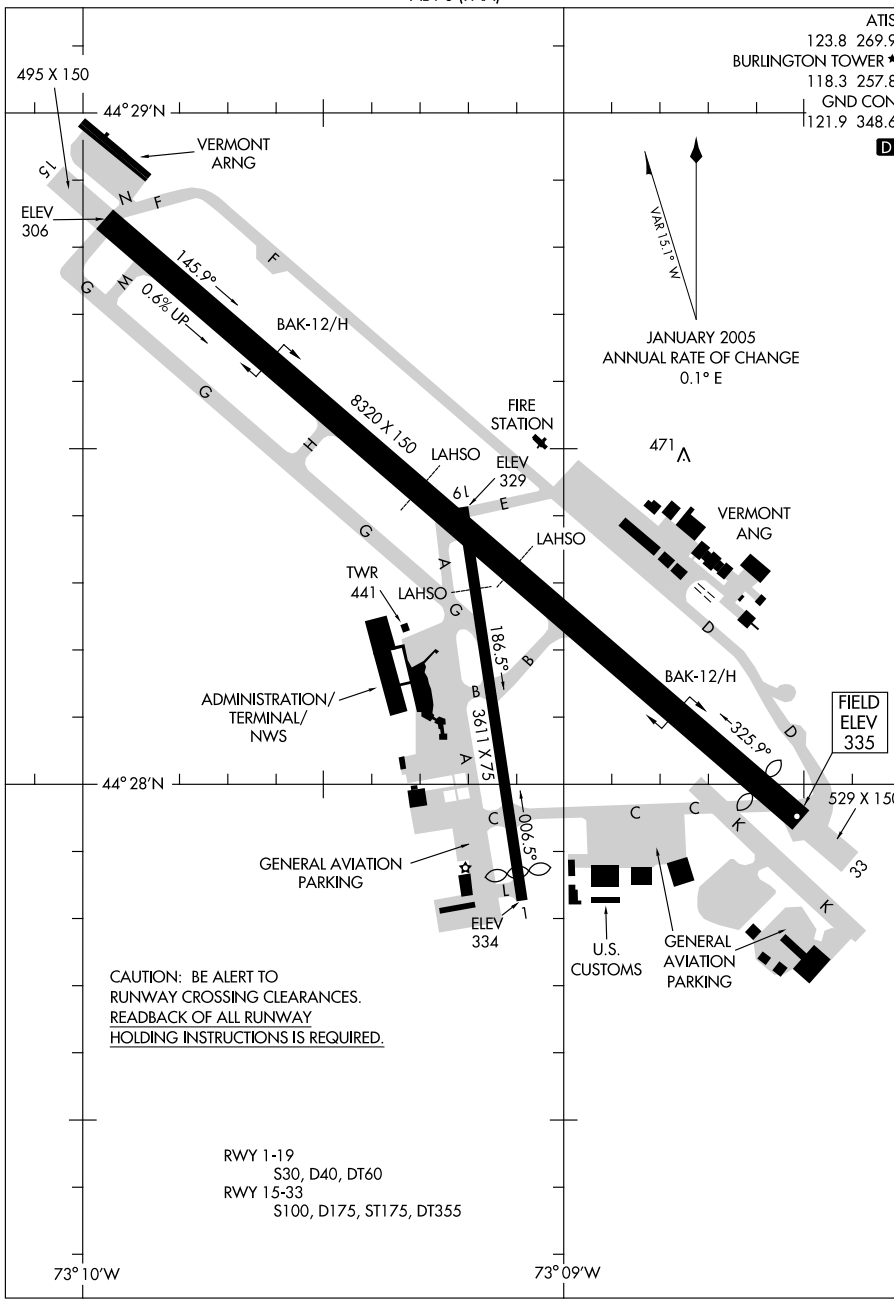
BUFFALO, NEW YORK
BUFFALO NIAGARA INTL (BUF)

10154

AIRPORT DIAGRAM

AL-70 (FAA)

BURLINGTON INTL (BTV)
BURLINGTON, VERMONT



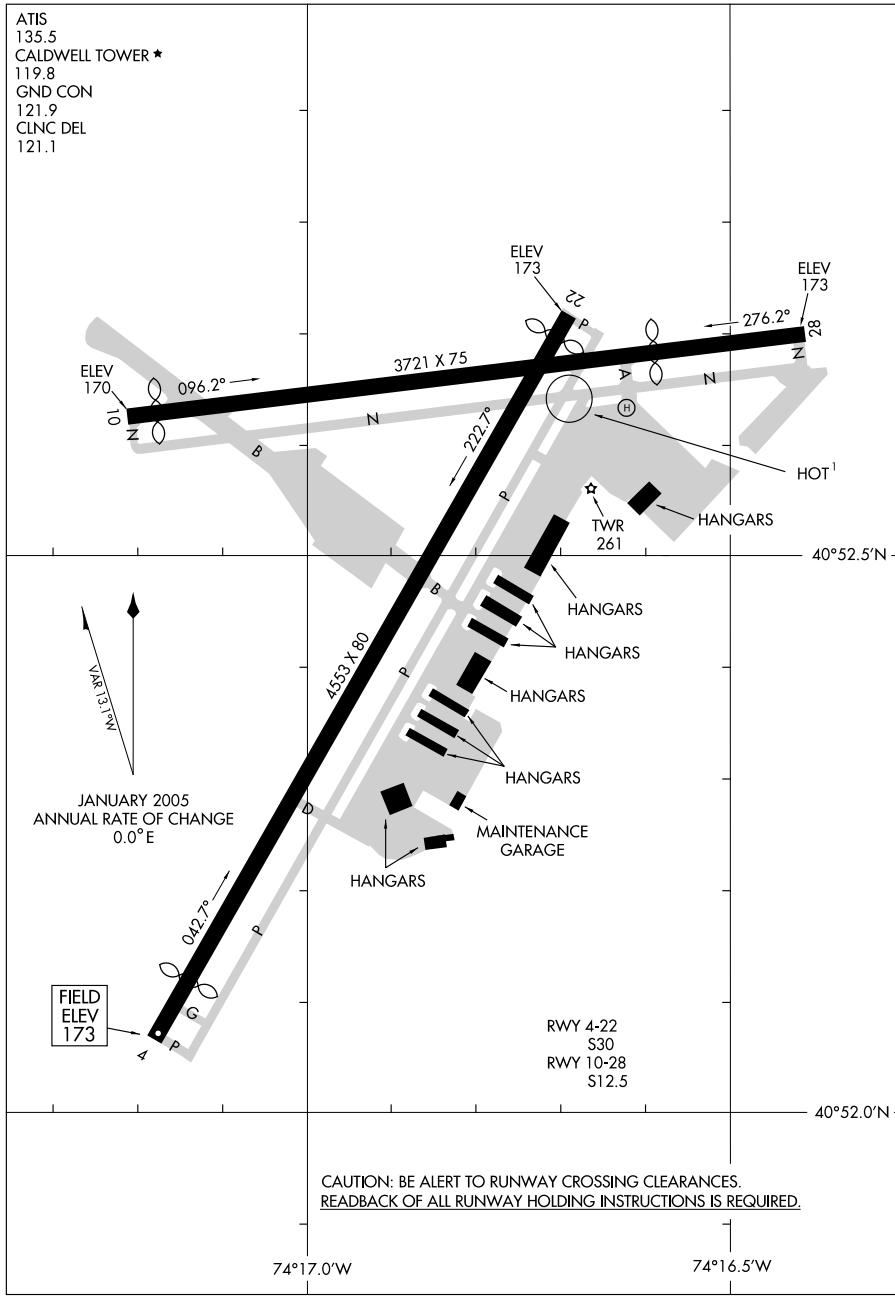
AIRPORT DIAGRAM
10154
BURLINGTON, VERMONT
BURLINGTON INTL (BTV)

09239

AIRPORT DIAGRAM

AL-5275 (FAA)

CALDWELL/ ESSEX COUNTY (CDW)
CALDWELL, NEW JERSEY



AIRPORT DIAGRAM

09239

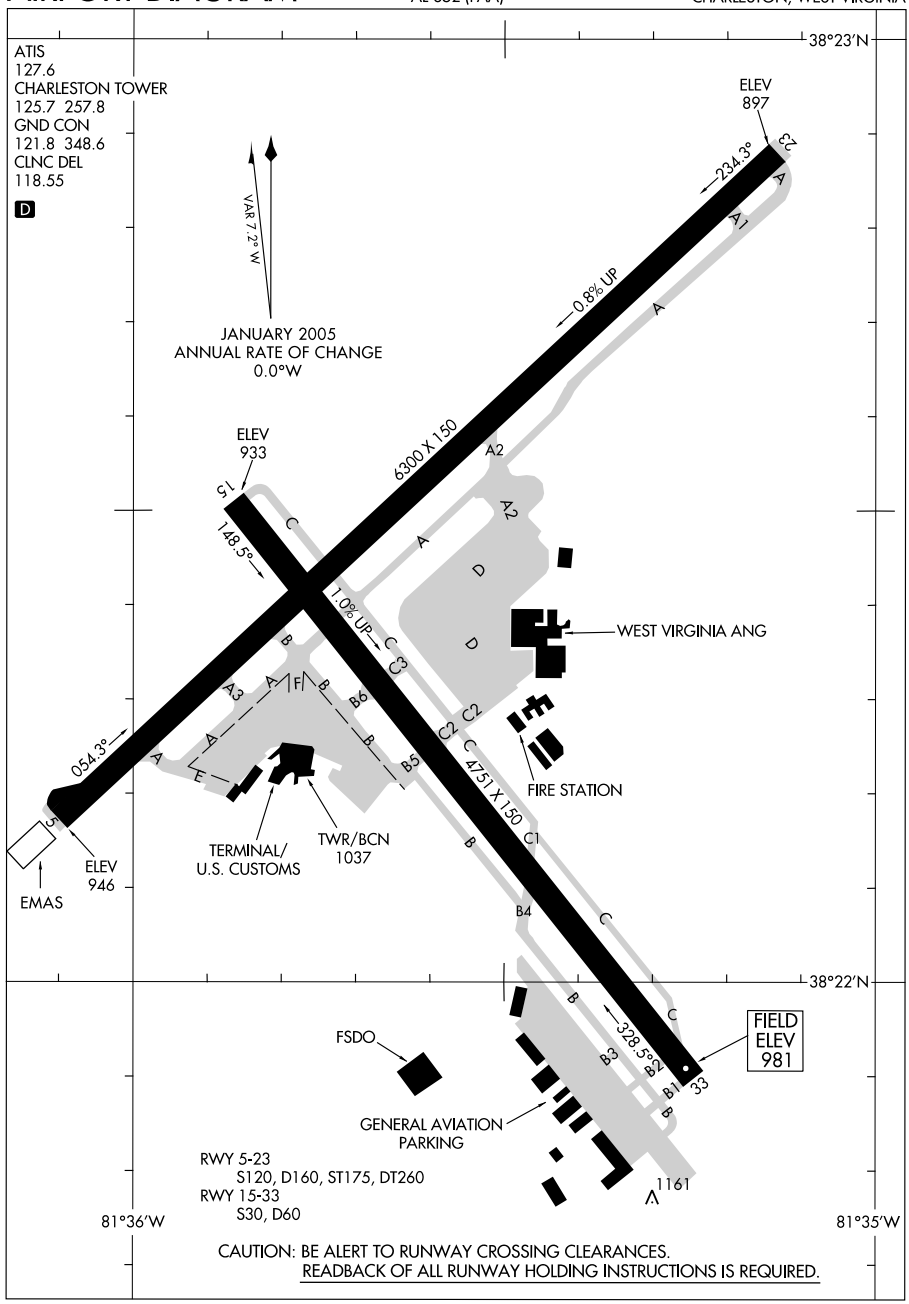
CALDWELL, NEW JERSEY
CALDWELL/ ESSEX COUNTY (CDW)

10098

AIRPORT DIAGRAM

AL-852 (FAA)

CHARLESTON/ YEAGER (CRW)
CHARLESTON, WEST VIRGINIA



AIRPORT DIAGRAM

10098

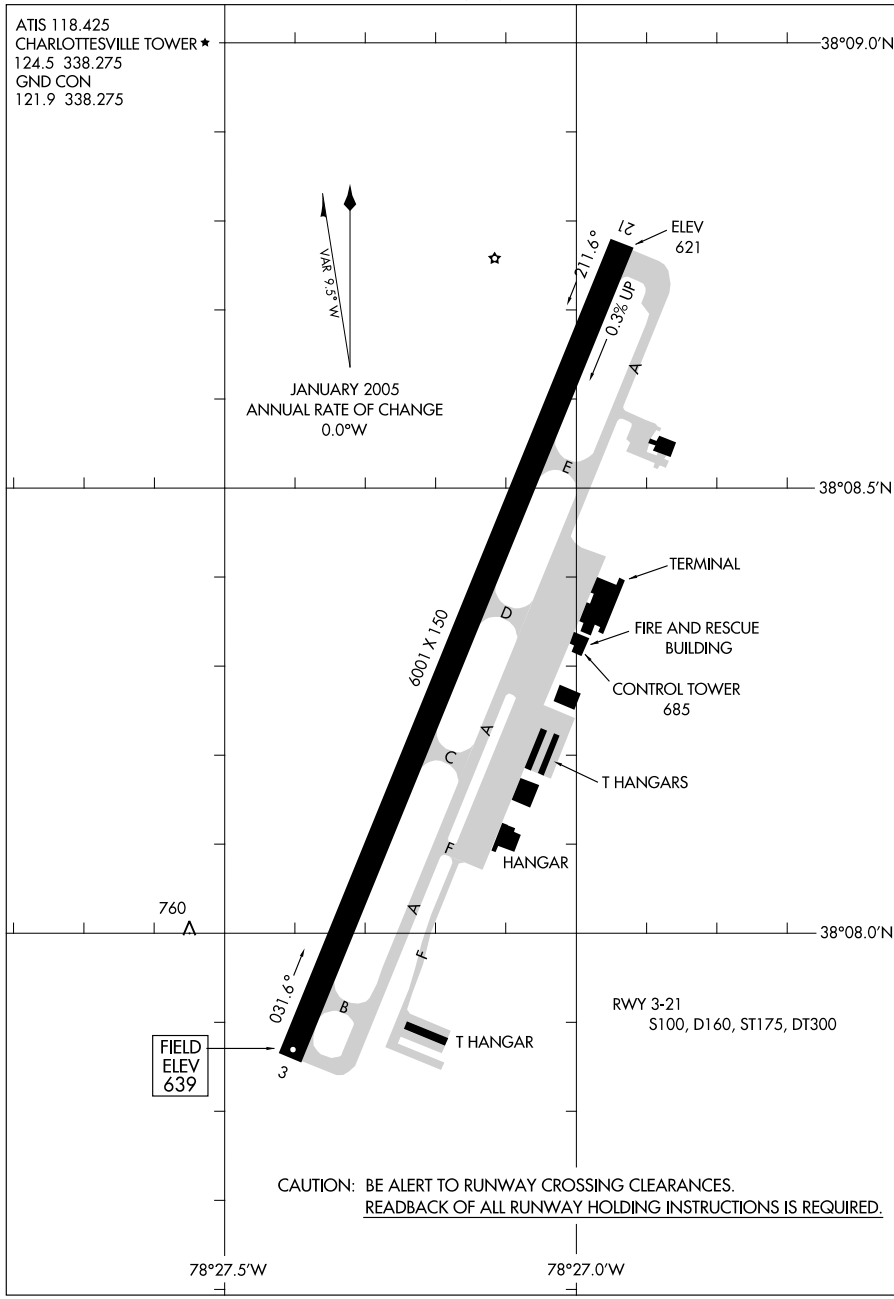
CHARLESTON, WEST VIRGINIA
CHARLESTON/ YEAGER (CRW)

06327

AIRPORT DIAGRAM

AL-765 (FAA)

CHARLOTTESVILLE-ALBERMARLE (CHO)
CHARLOTTESVILLE, VIRGINIA



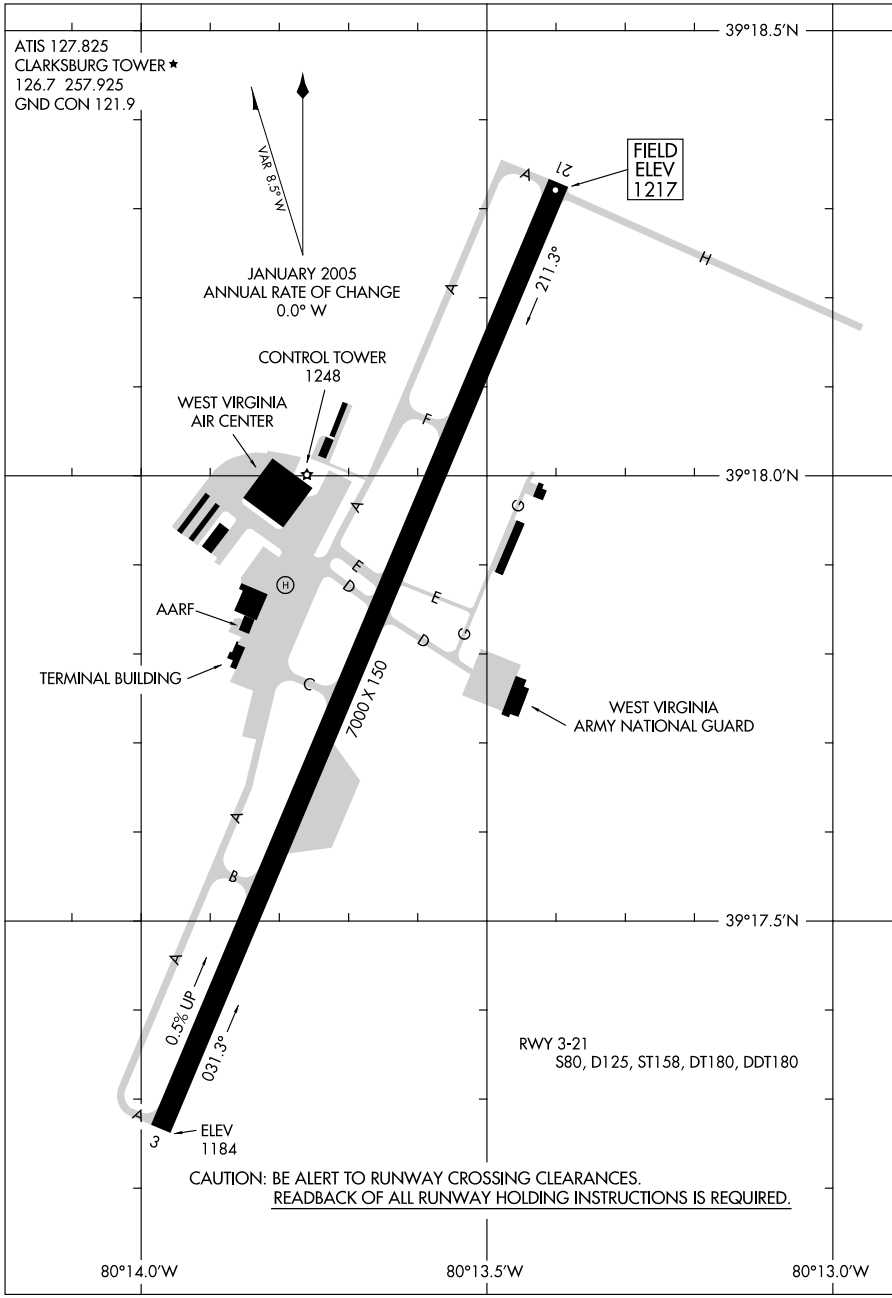
AIRPORT DIAGRAM
06327

CHARLOTTESVILLE, VIRGINIA
CHARLOTTESVILLE-ALBERMARLE (CHO)

07298

AIRPORT DIAGRAM

CLARKSBURG / NORTH CENTRAL WEST VIRGINIA (CKB)
AL-616 (FAA)
CLARKSBURG, WEST VIRGINIA



AIRPORT DIAGRAM

07298

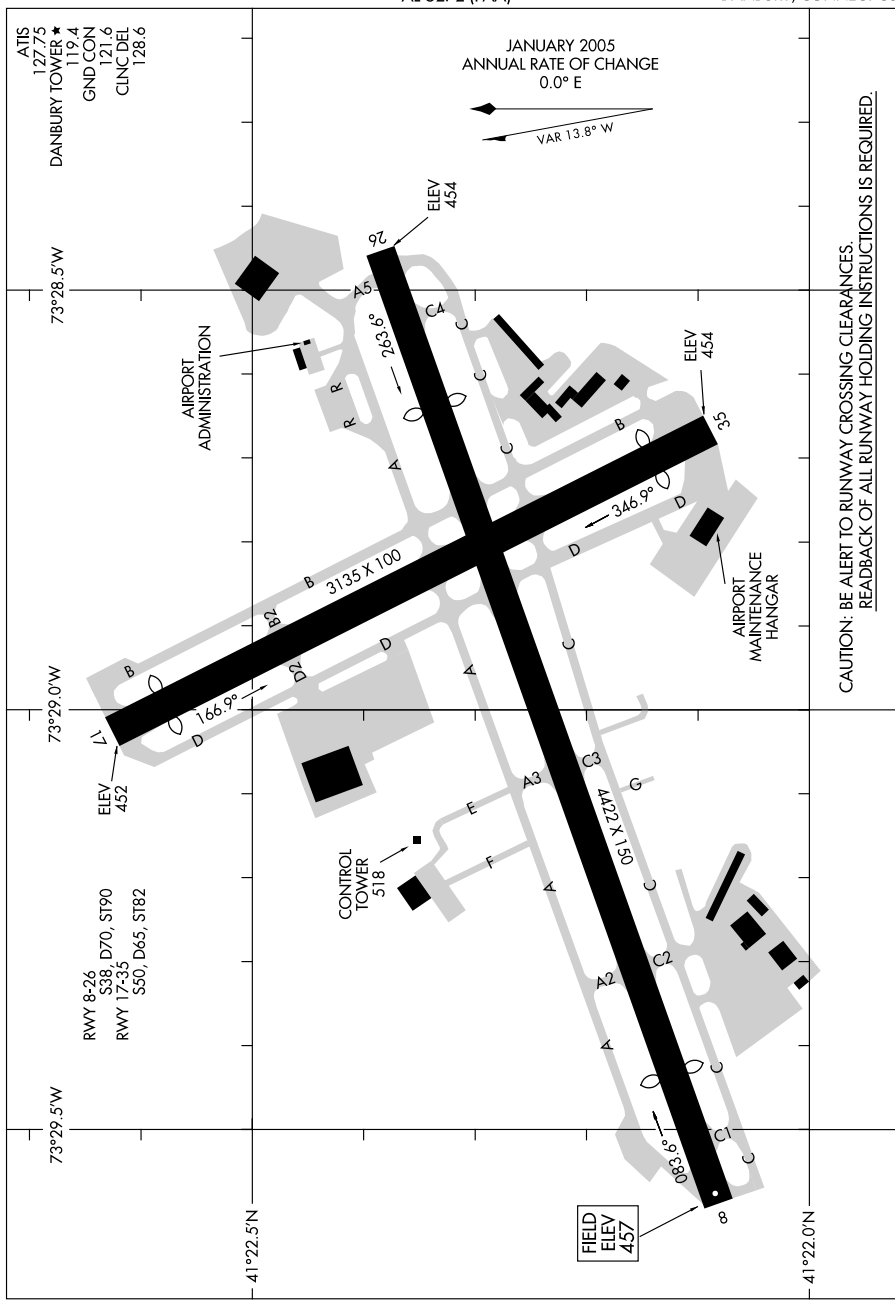
CLARKSBURG, WEST VIRGINIA
CLARKSBURG / NORTH CENTRAL WEST VIRGINIA (CKB)

09183

AIRPORT DIAGRAM

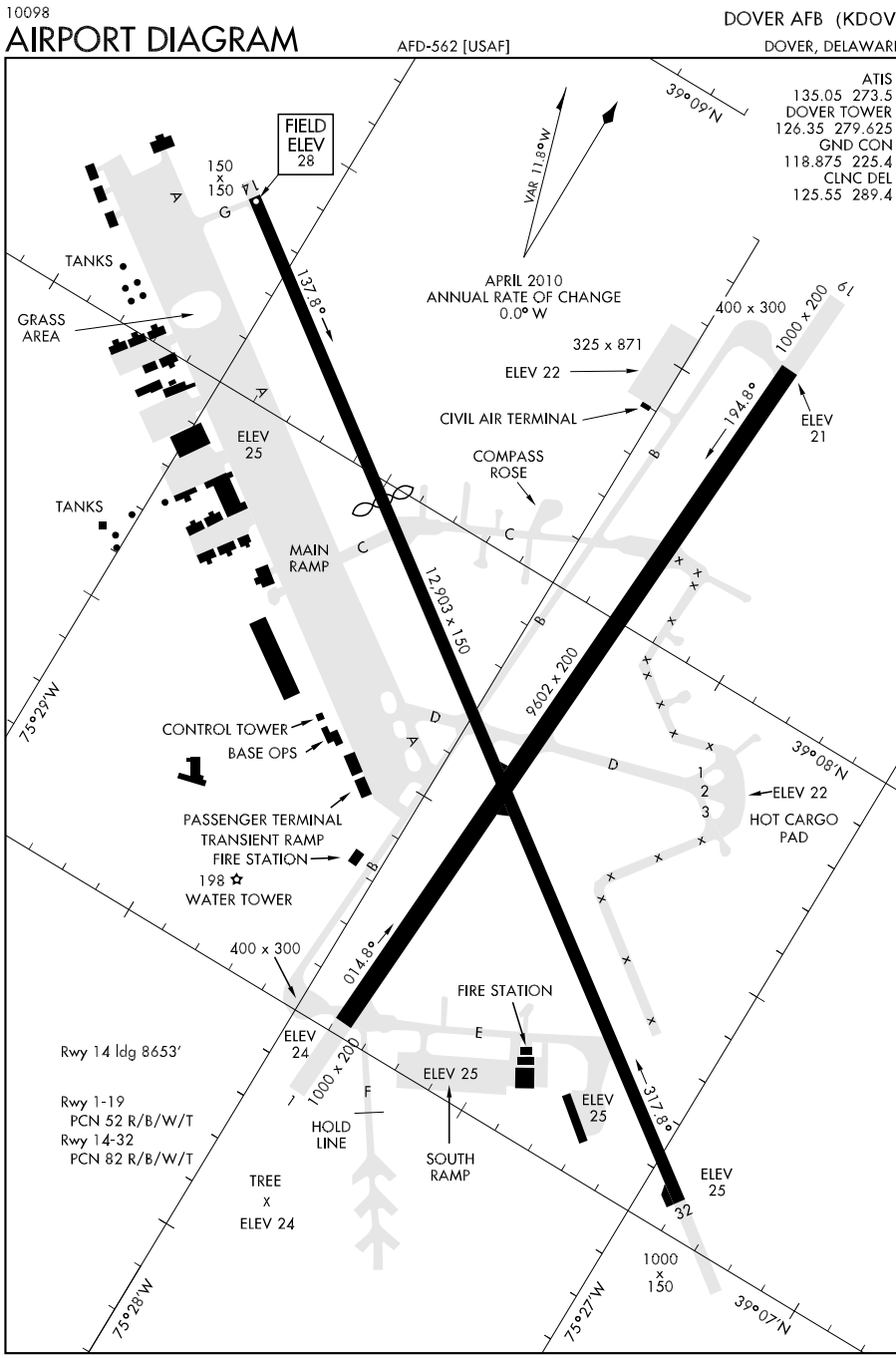
AL-5272 (FAA)

DANBURY MUNI (DXR)
DANBURY, CONNECTICUT



AIRPORT DIAGRAM
09183

DANBURY, CONNECTICUT
DANBURY MUNI (DXR)

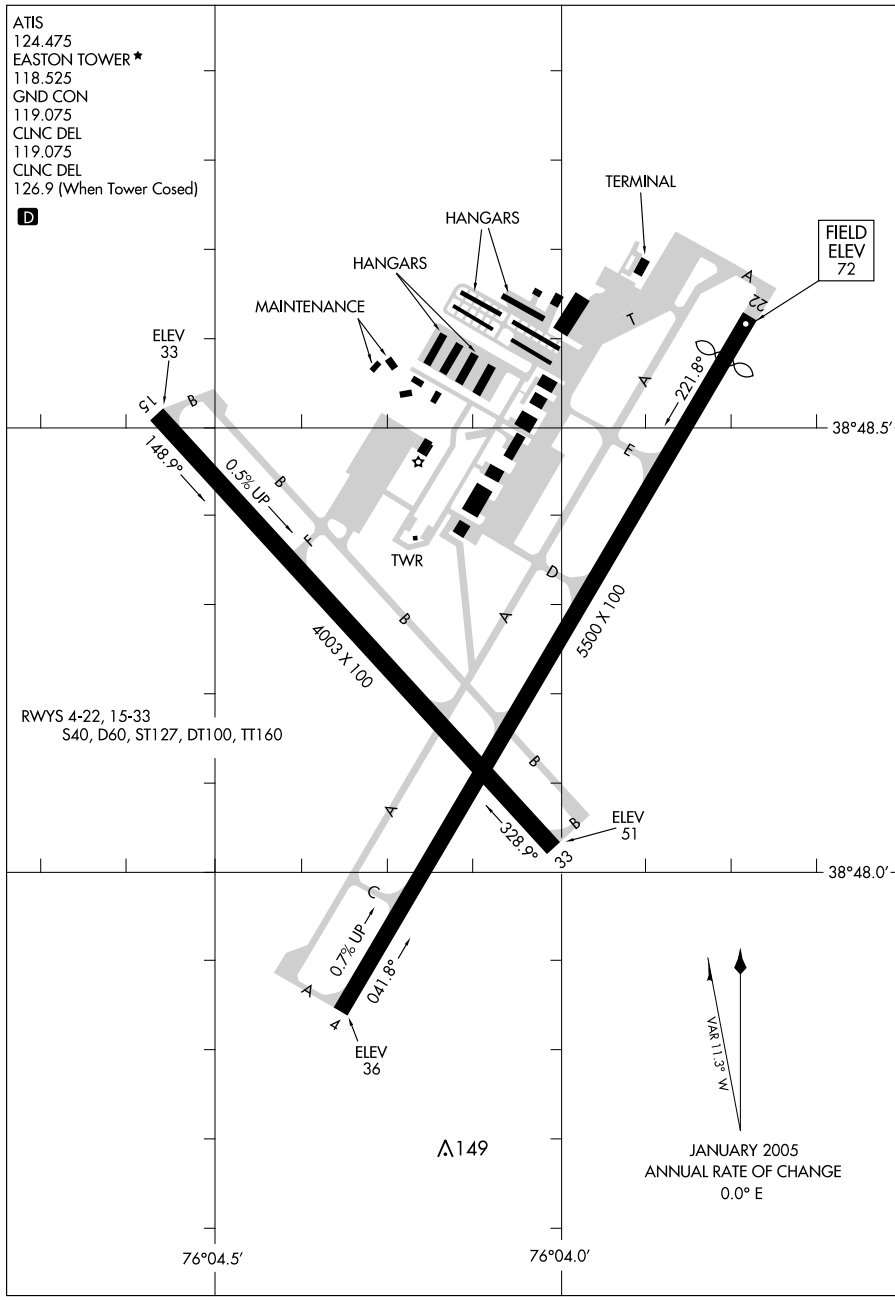

10098
AIRPORT DIAGRAM
AFD-562 [USAF]
DOVER AFB (KDOV)
DOVER, DELAWARE
ATIS
135.05 273.5
DOVER TOWER
126.35 279.625
GND CON
118.875 225.4
CLNC DEL
125.55 289.4
FIELD ELEV 28
150 x 150
VAR 11.8°W
APRIL 2010
ANNUAL RATE OF CHANGE
0.0° W
39°09'N
137.8°
TANKS
GRASS AREA
ELEV 25
TANKS
MAIN RAMP
400 x 300
325 x 871
ELEV 22
CIVIL AIR TERMINAL
COMPASS ROSE
1000 x 200
194.8°
ELEV 21
12,903 x 150
9602 x 200
75°29'W
CONTROL TOWER
BASE OPS
PASSENGER TERMINAL
TRANSIENT RAMP
FIRE STATION
198
WATER TOWER
39°08'N
ELEV 22
HOT CARGO PAD
400 x 300
014.8°
FIRE STATION
ELEV 24
Rwy 14 ldg 8653'
1000 x 200
ELEV 25
Rwy 1-19
PCN 52 R/B/W/T
Rwy 14-32
PCN 82 R/B/W/T
HOLD LINE
SOUTH RAMP
317.8°
ELEV 25
TREE
X
ELEV 24
ELEV 25
32
1000 x 150
75°28'W
75°27'W
39°07'N
AIRPORT DIAGRAM
DOVER, DELAWARE
DOVER AFB (KDOV)

09127

AIRPORT DIAGRAM

AL-5596 (FAA)

EASTON/NEWNAM FIELD (ESN)
EASTON, MARYLAND



AIRPORT DIAGRAM

09127

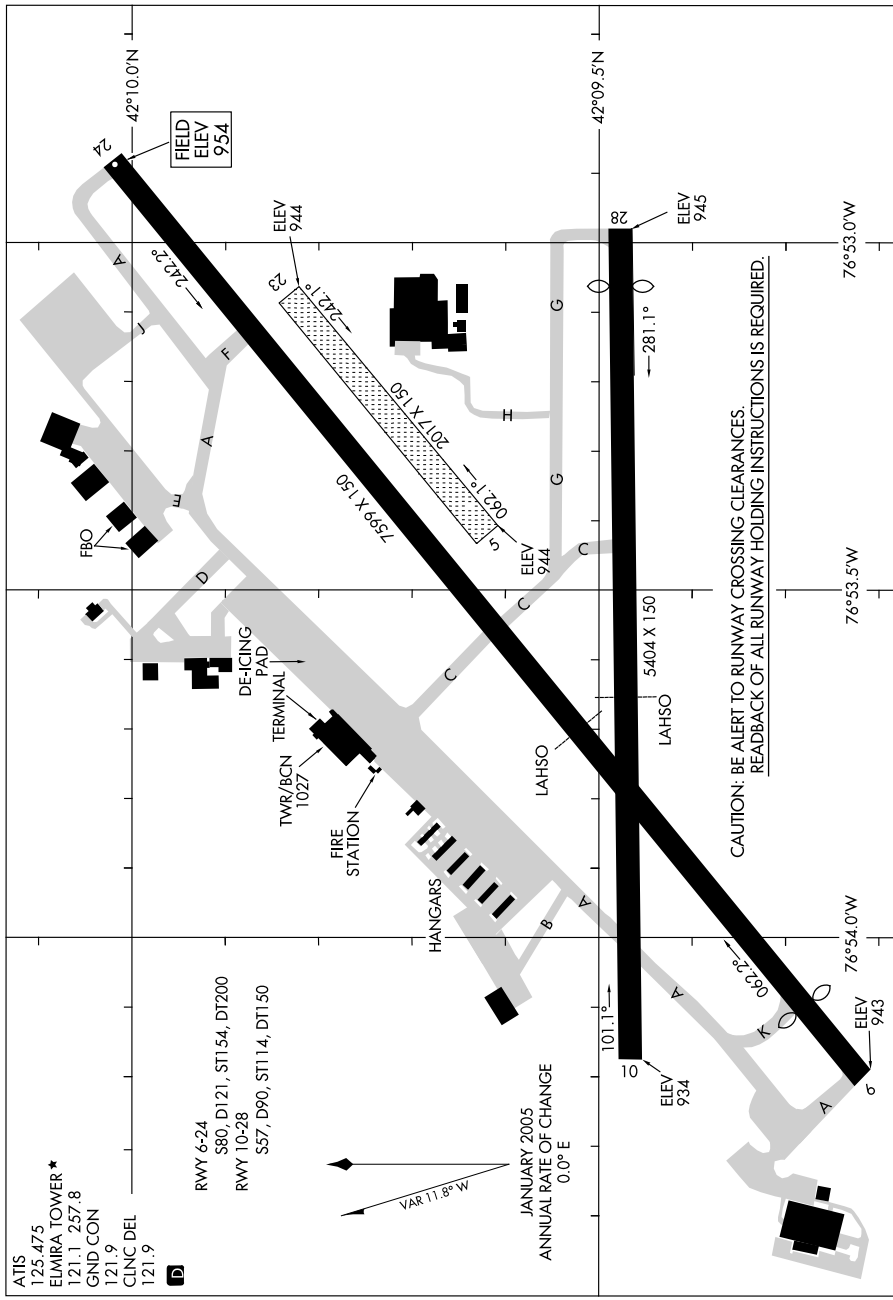
EASTON, MARYLAND
EASTON/NEWNAM FIELD (ESN)

10042

AIRPORT DIAGRAM

AL-131 (FAA)

ELMIRA/CORNING RGNL (ELM)
ELMIRA, NEW YORK



AIRPORT DIAGRAM
10042

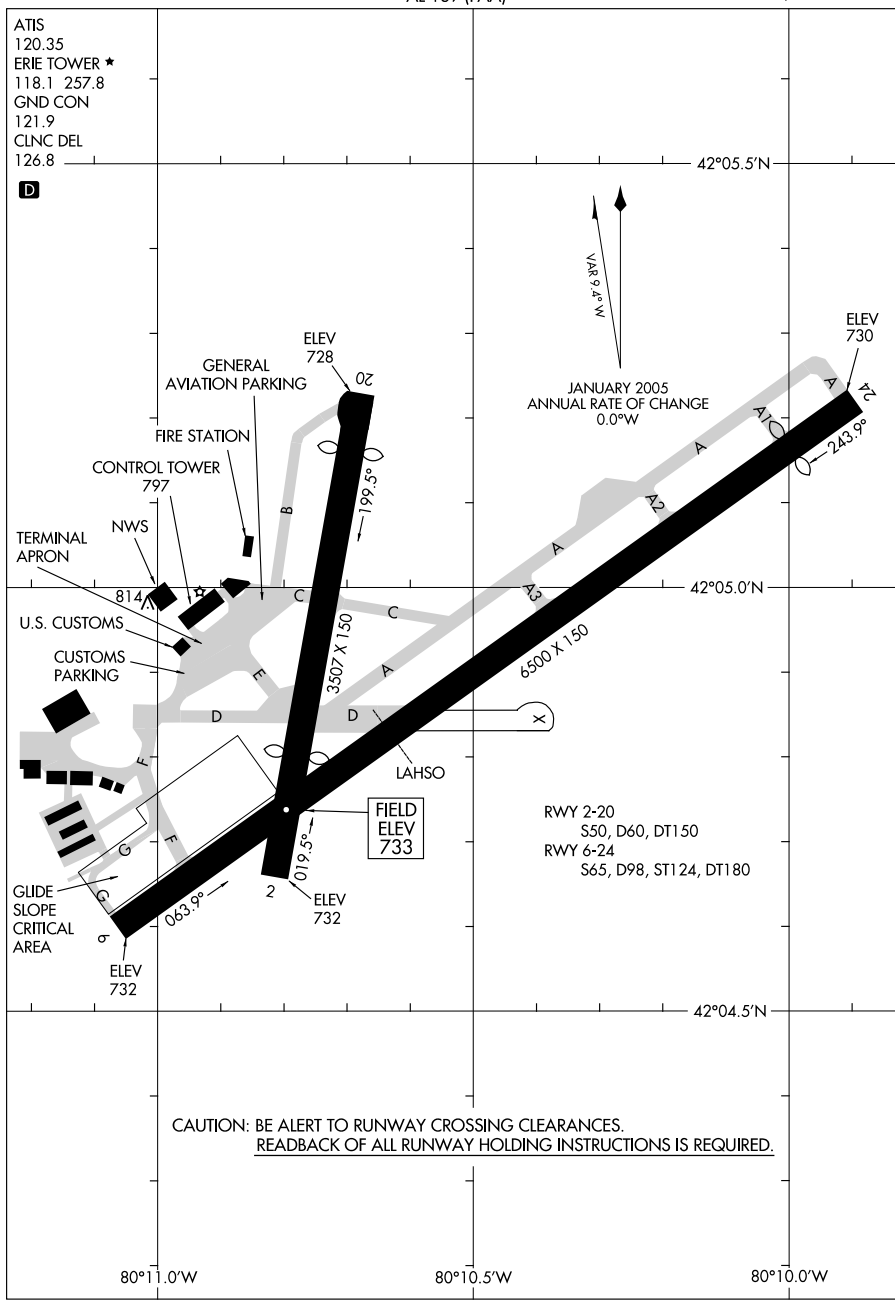
ELMIRA, NEW YORK
ELMIRA/CORNING RGNL (ELM)

09015

AIRPORT DIAGRAM

AL-139 (FAA)

ERIE INTL/TOM RIDGE FIELD (ERI)
ERIE, PENNSYLVANIA

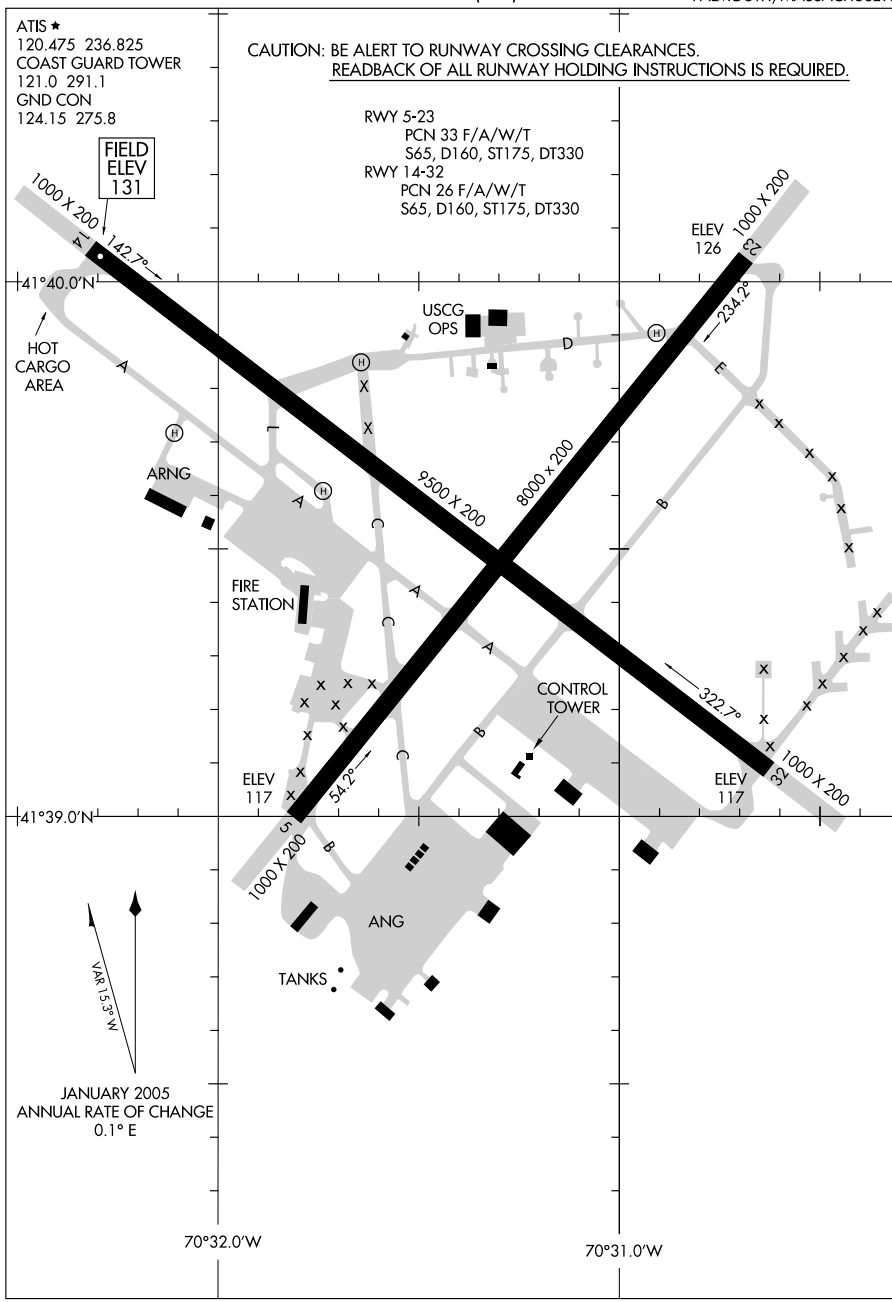


AIRPORT DIAGRAM
09015
ERIE, PENNSYLVANIA
ERIE INTL/TOM RIDGE FIELD (ERI)

09183

AIRPORT DIAGRAM

FALMOUTH/CAPE COD COAST GUARD AIR STATION (FMH)
AL-10362 (FAA)
FALMOUTH, MASSACHUSETTS



AIRPORT DIAGRAM

FALMOUTH, MASSACHUSETTS
FALMOUTH/ CAPE COD COAST GUARD AIR STATION (FMH)

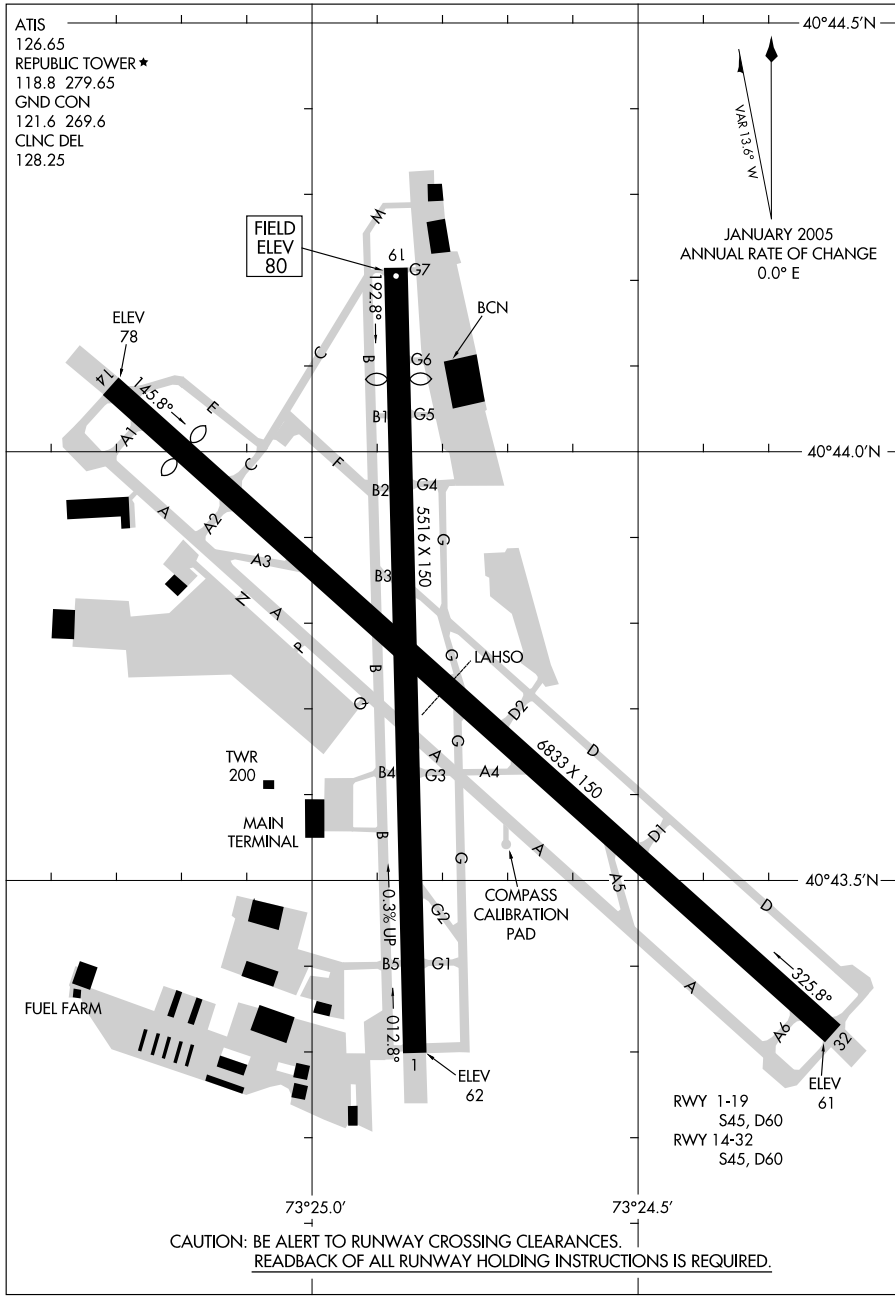
09183

10154

AIRPORT DIAGRAM

AL-704 (FAA)

FARMINGDALE / REPUBLIC (FRG)
FARMINGDALE, NEW YORK



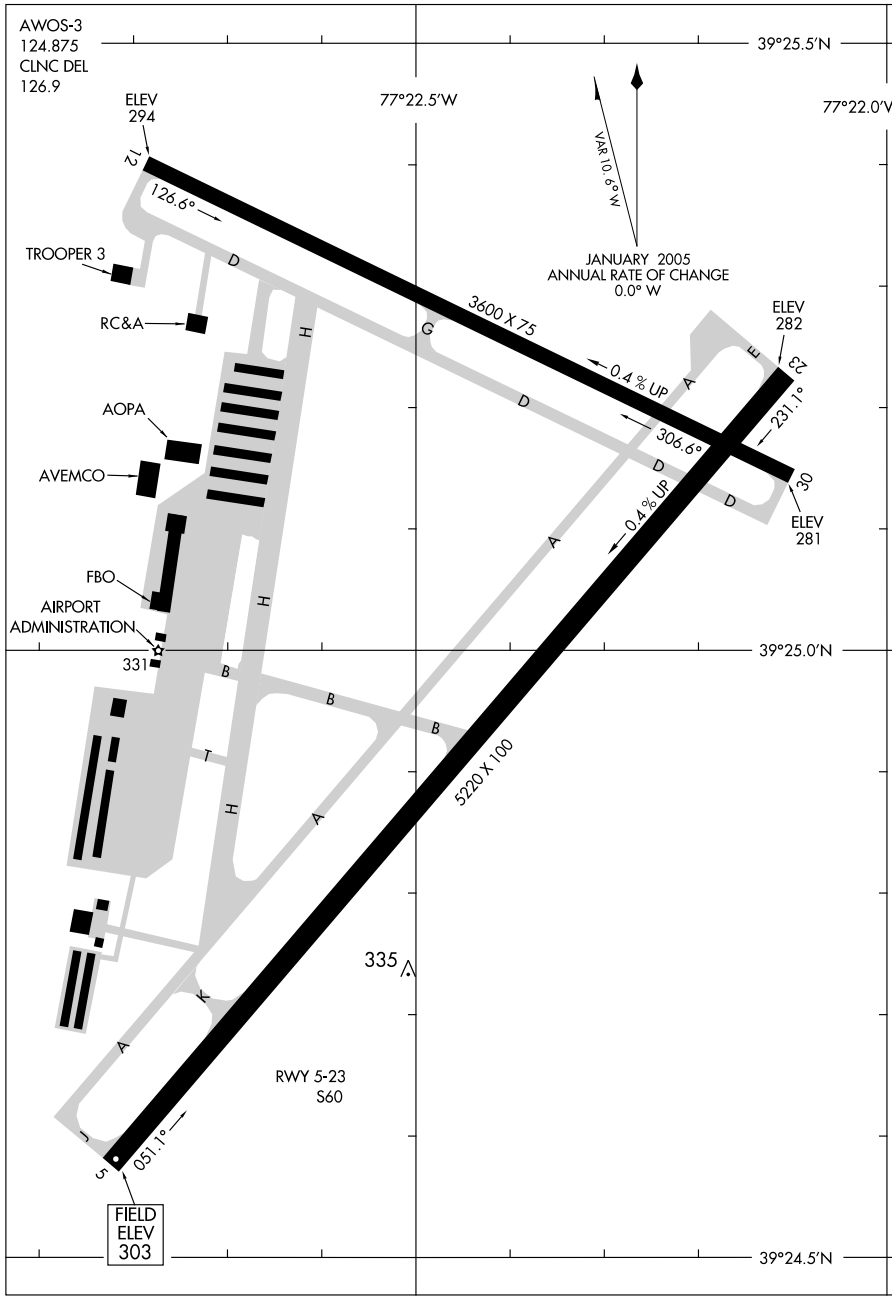
AIRPORT DIAGRAM
10154
FARMINGDALE, NEW YORK
FARMINGDALE / REPUBLIC (FRG)

09351

AIRPORT DIAGRAM

AL-5089 (FAA)

FREDERICK MUNI (FDK)
FREDERICK, MARYLAND



AIRPORT DIAGRAM

FREDERICK, MARYLAND
FREDERICK MUNI (FDK)

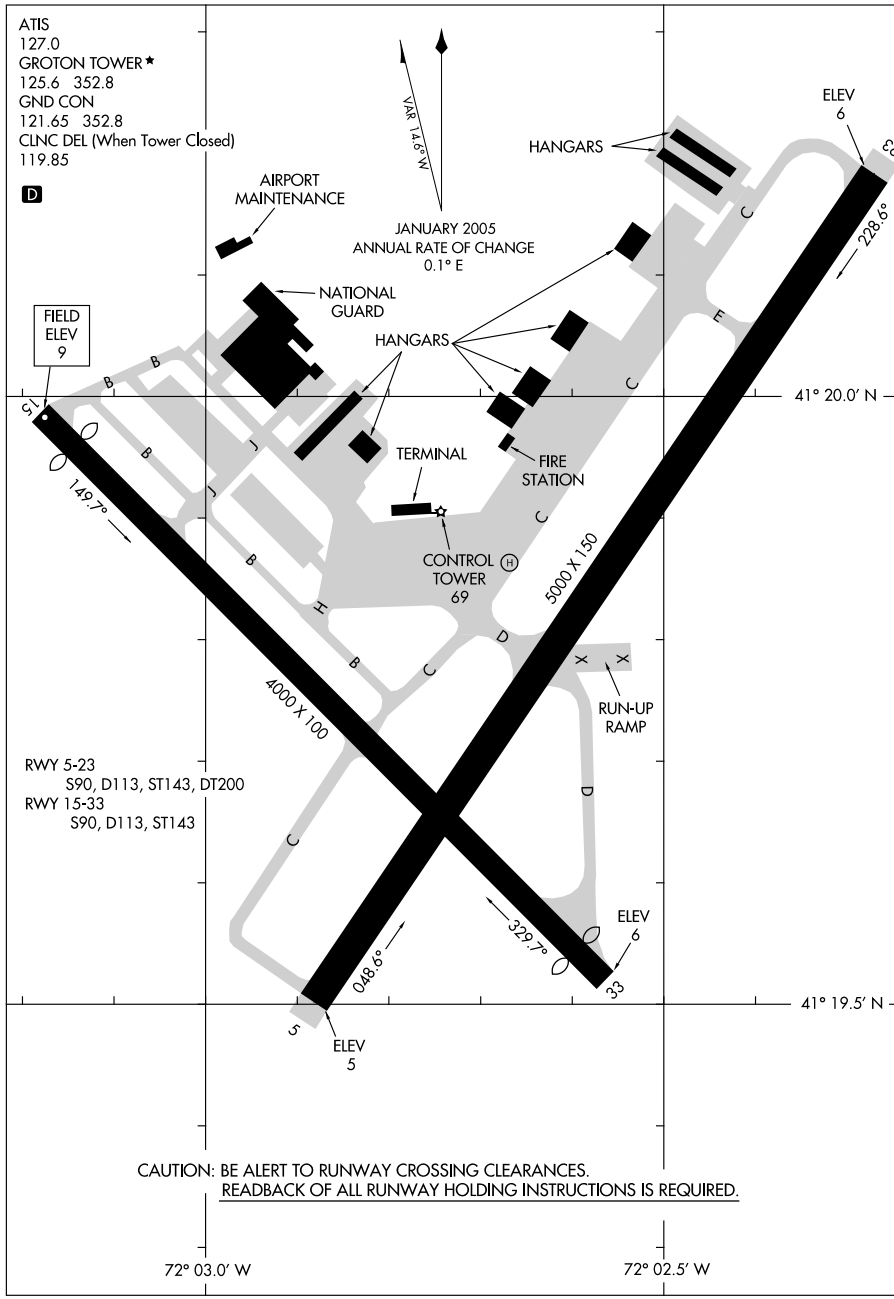
09351

09071

AIRPORT DIAGRAM

AL-5049 (FAA)

GROTON-NEW LONDON (GON)
GROTON (NEW LONDON), CONNECTICUT



AIRPORT DIAGRAM

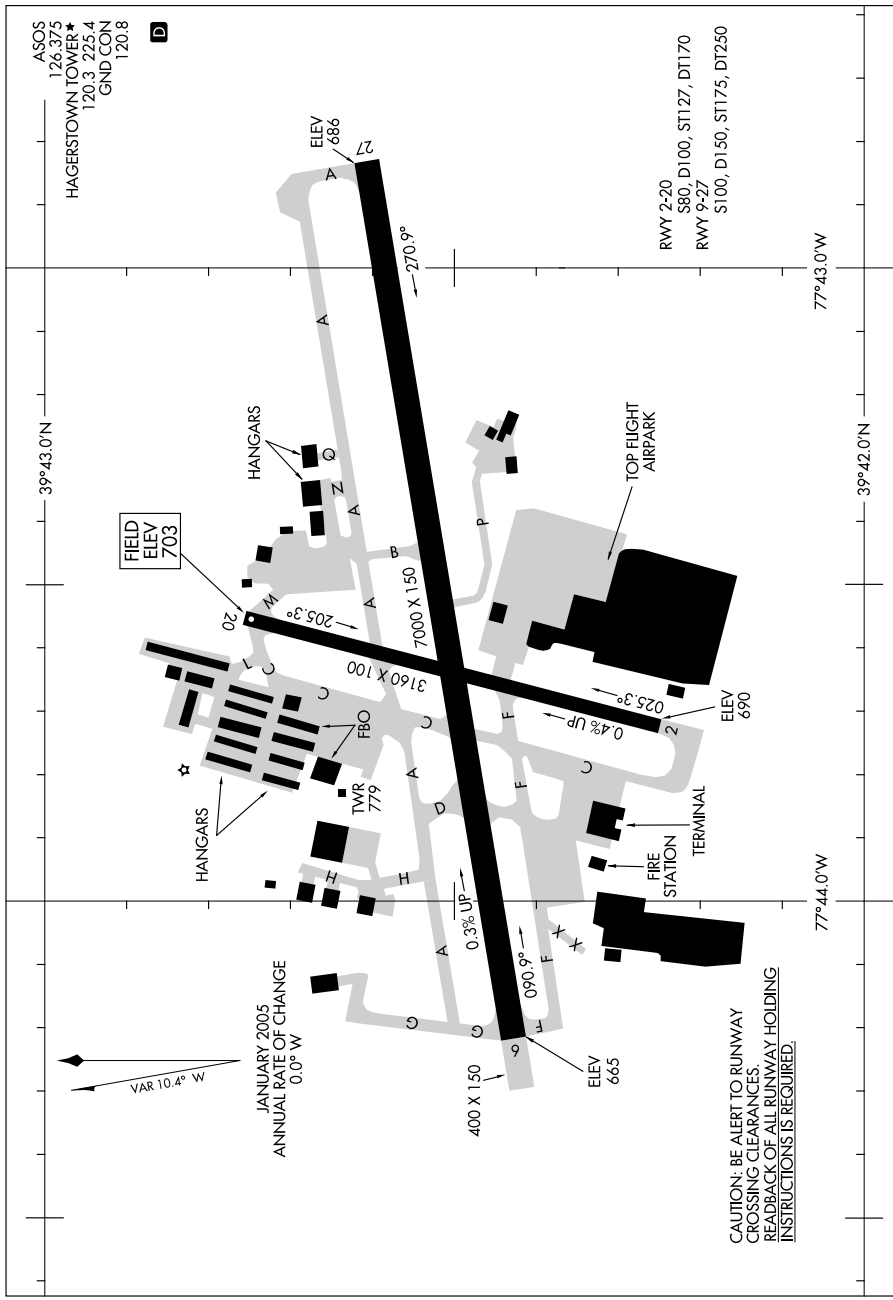
09071

GROTON (NEW LONDON), CONNECTICUT
GROTON-NEW LONDON (GON)

10154

AIRPORT DIAGRAM

HAGERSTOWN RGNL-RICHARD A HENSON FIELD (HGR)
AL-5114 (FAA)
HAGERSTOWN, MARYLAND



AIRPORT DIAGRAM

10154

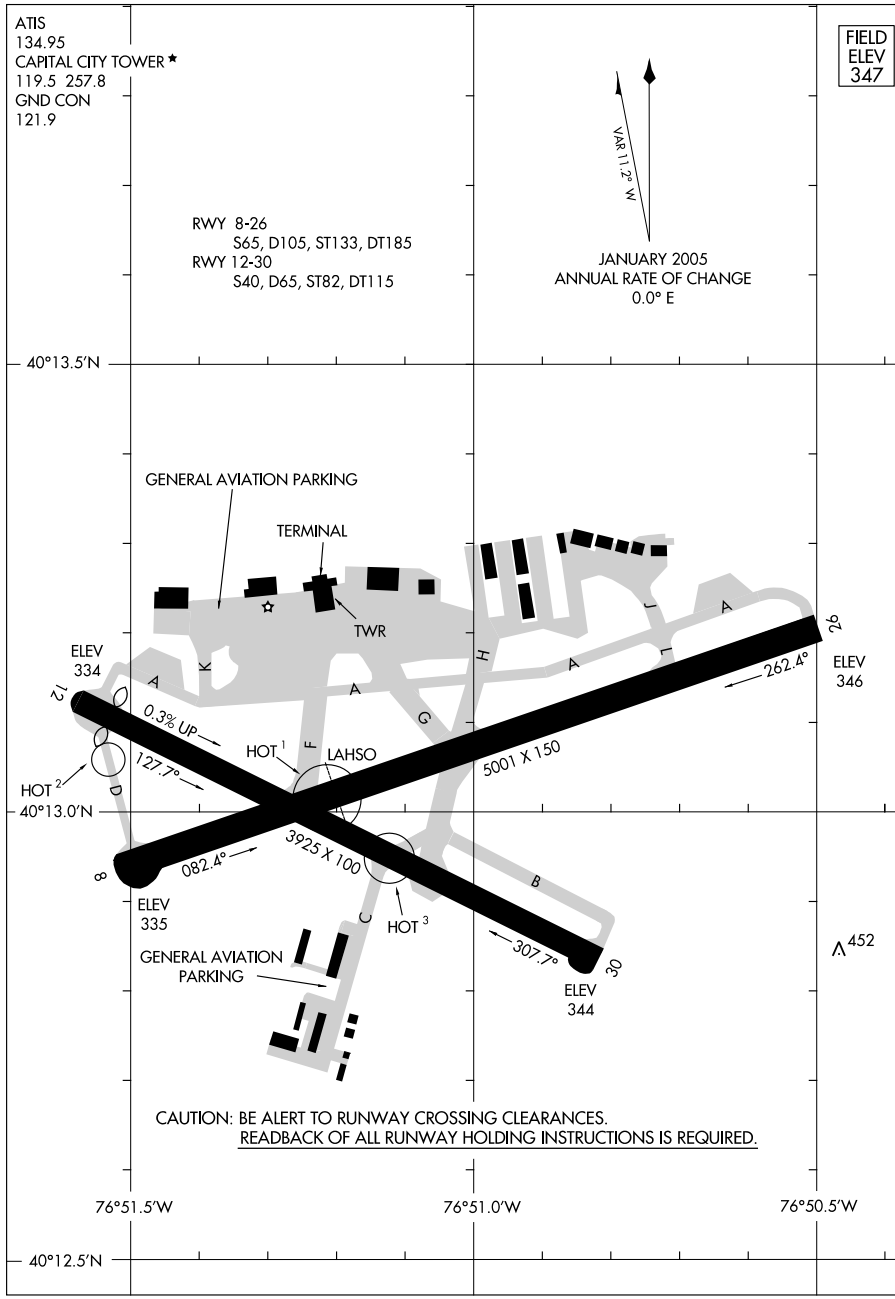
HAGERSTOWN, MARYLAND
HAGERSTOWN RGNL-RICHARD A HENSON FIELD (HGR)

10042

AIRPORT DIAGRAM

AL-187 (FAA)

HARRISBURG / CAPITAL CITY (CXY)
HARRISBURG, PENNSYLVANIA



AIRPORT DIAGRAM

10042

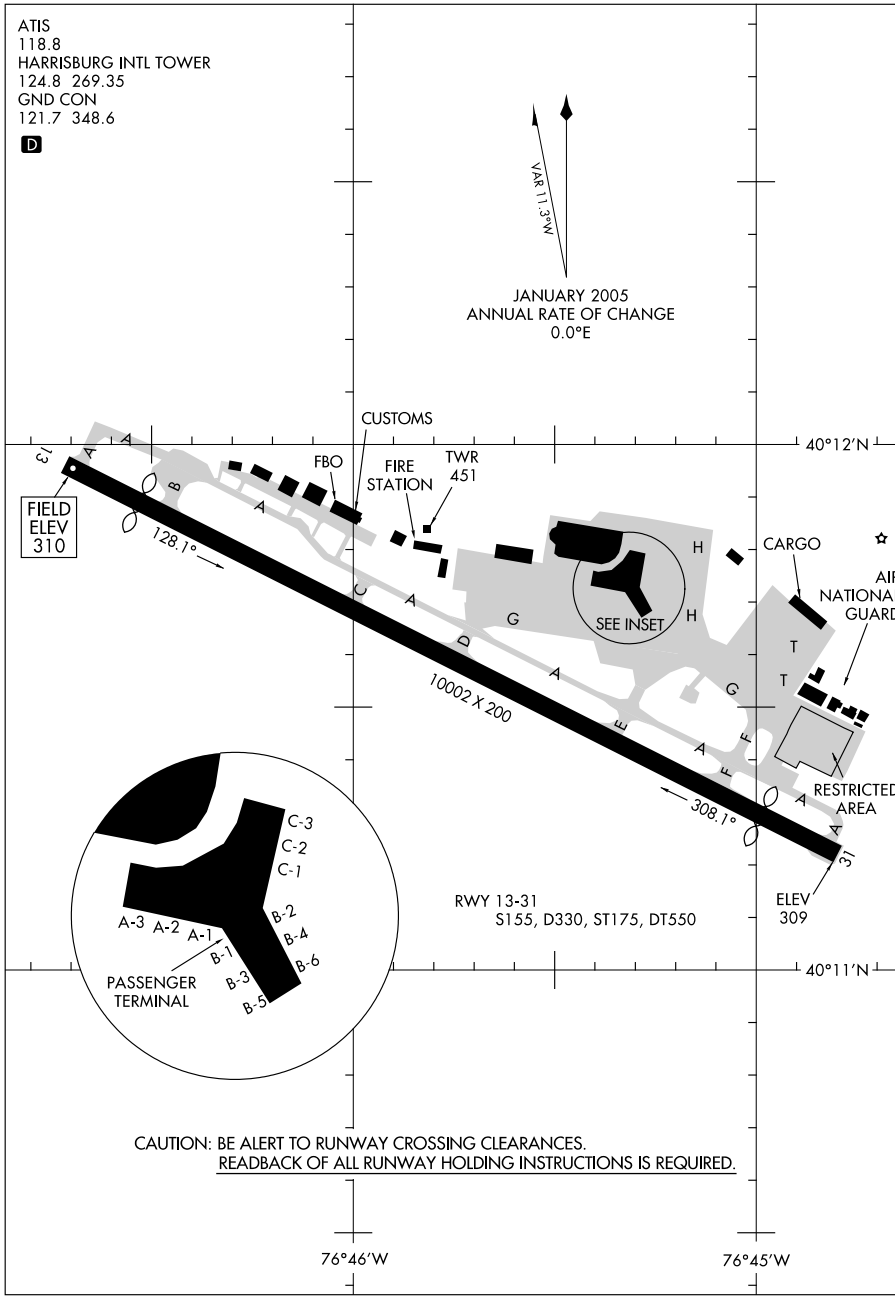
HARRISBURG, PENNSYLVANIA
HARRISBURG / CAPITAL CITY (CXY)

10098

AIRPORT DIAGRAM

AL-188 (FAA)

HARRISBURG INTL (MDT)
HARRISBURG, PENNSYLVANIA



AIRPORT DIAGRAM

10098

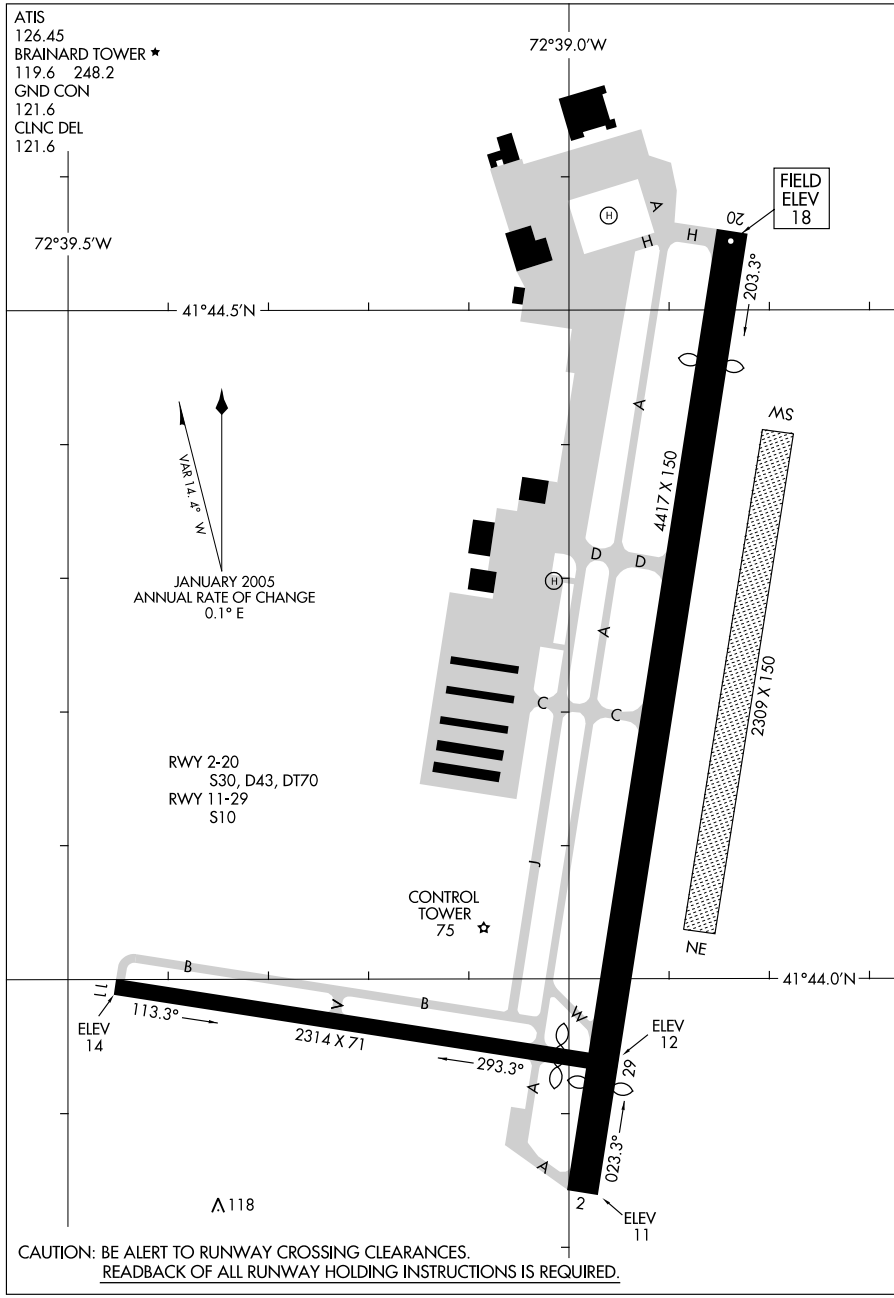
HARRISBURG, PENNSYLVANIA
HARRISBURG INTL (MDT)

09015

AIRPORT DIAGRAM

AL-189 (FAA)

HARTFORD-BRAINARD (HFD)
HARTFORD, CONNECTICUT



AIRPORT DIAGRAM

09015

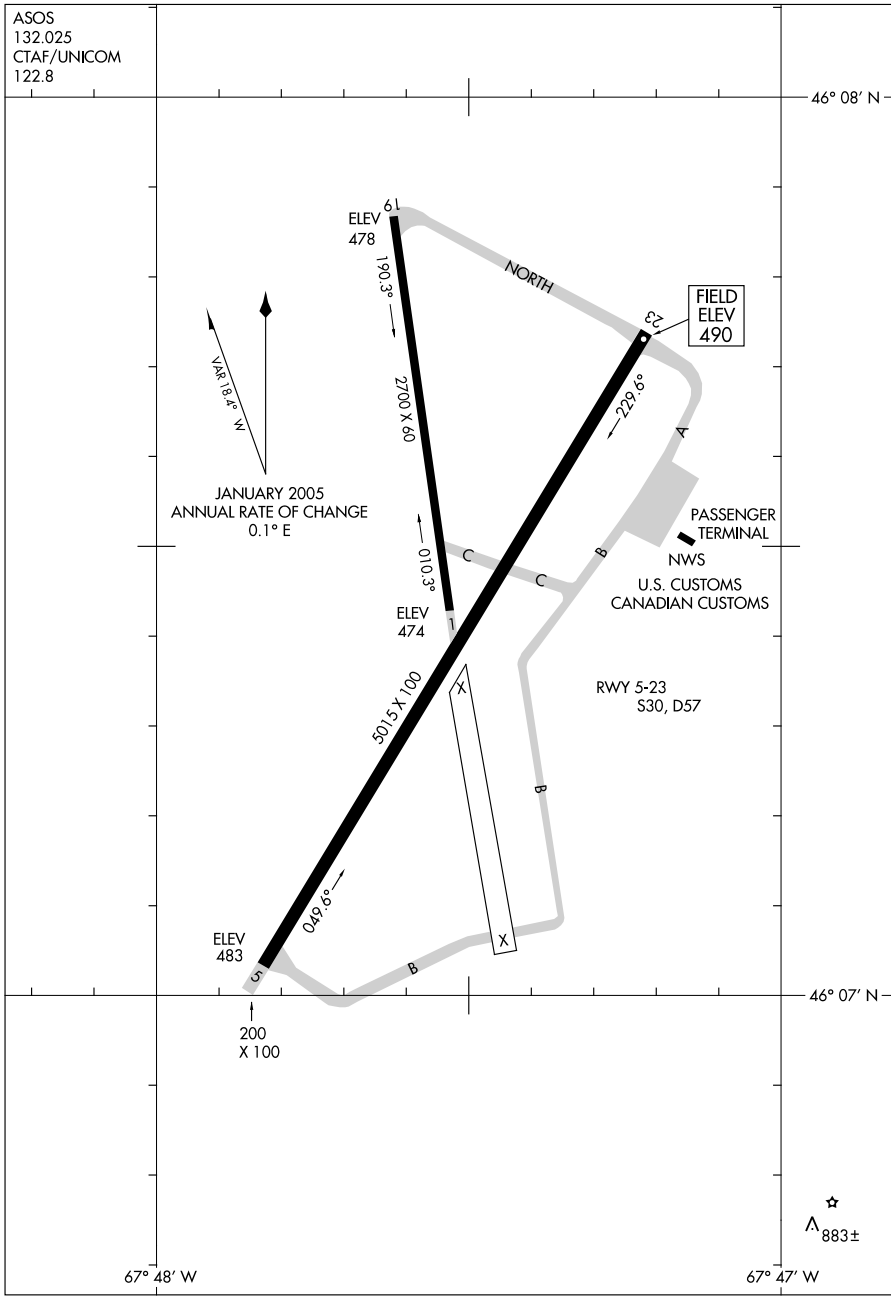
HARTFORD, CONNECTICUT
HARTFORD-BRAINARD (HFD)

10098

AIRPORT DIAGRAM

AL-196 (FAA)

HOULTON INTL (HUL)
HOULTON, MAINE



AIRPORT DIAGRAM

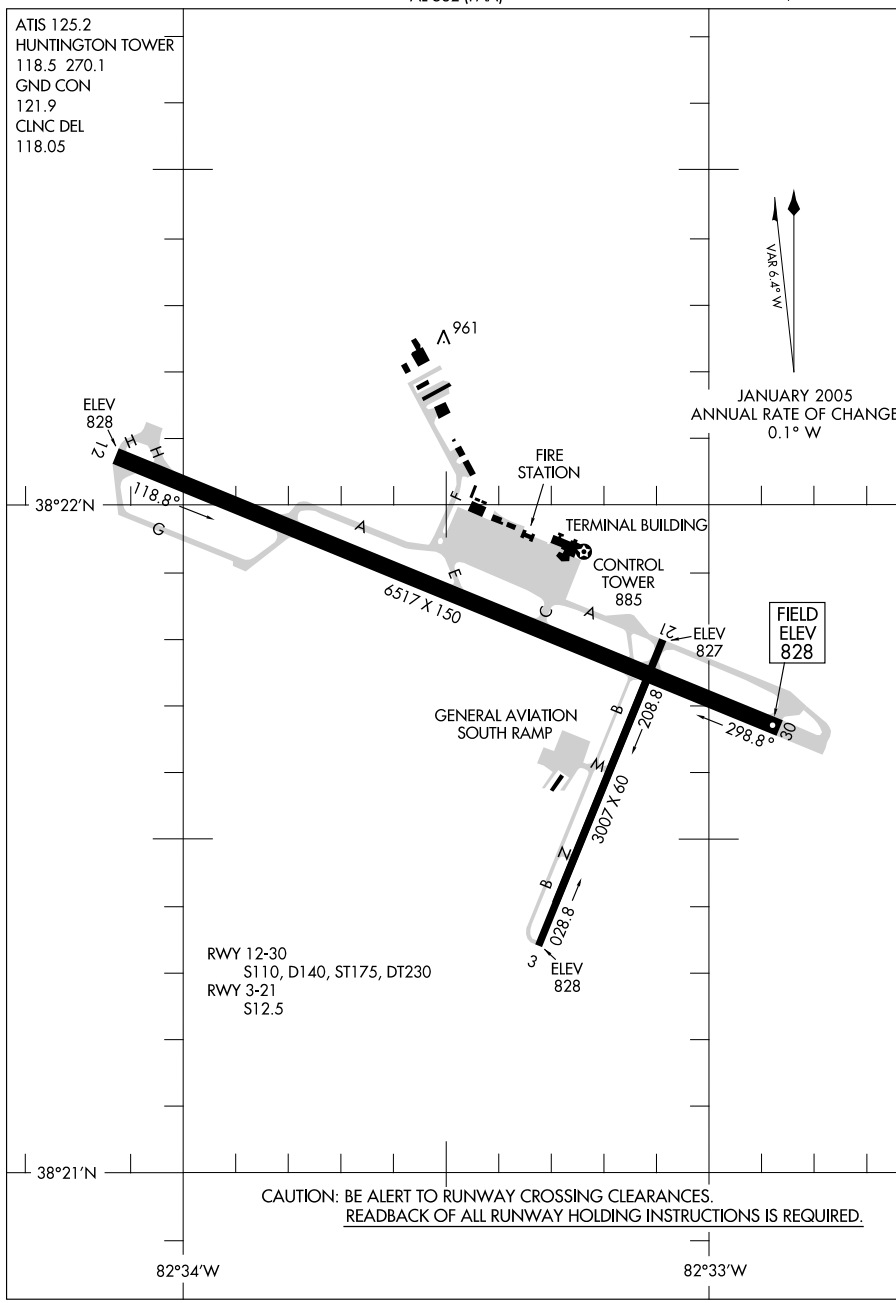
10098

HOULTON, MAINE
HOULTON INTL (HUL)

07074

AIRPORT DIAGRAM

HUNTINGTON/ TRI-STATE/MILTON J. FERGUSON FIELD (HTS)
AL-532 (FAA)
HUNTINGTON, WEST VIRGINIA



AIRPORT DIAGRAM

07074

HUNTINGTON, WEST VIRGINIA
HUNTINGTON/ TRI-STATE/MILTON J. FERGUSON FIELD (HTS)

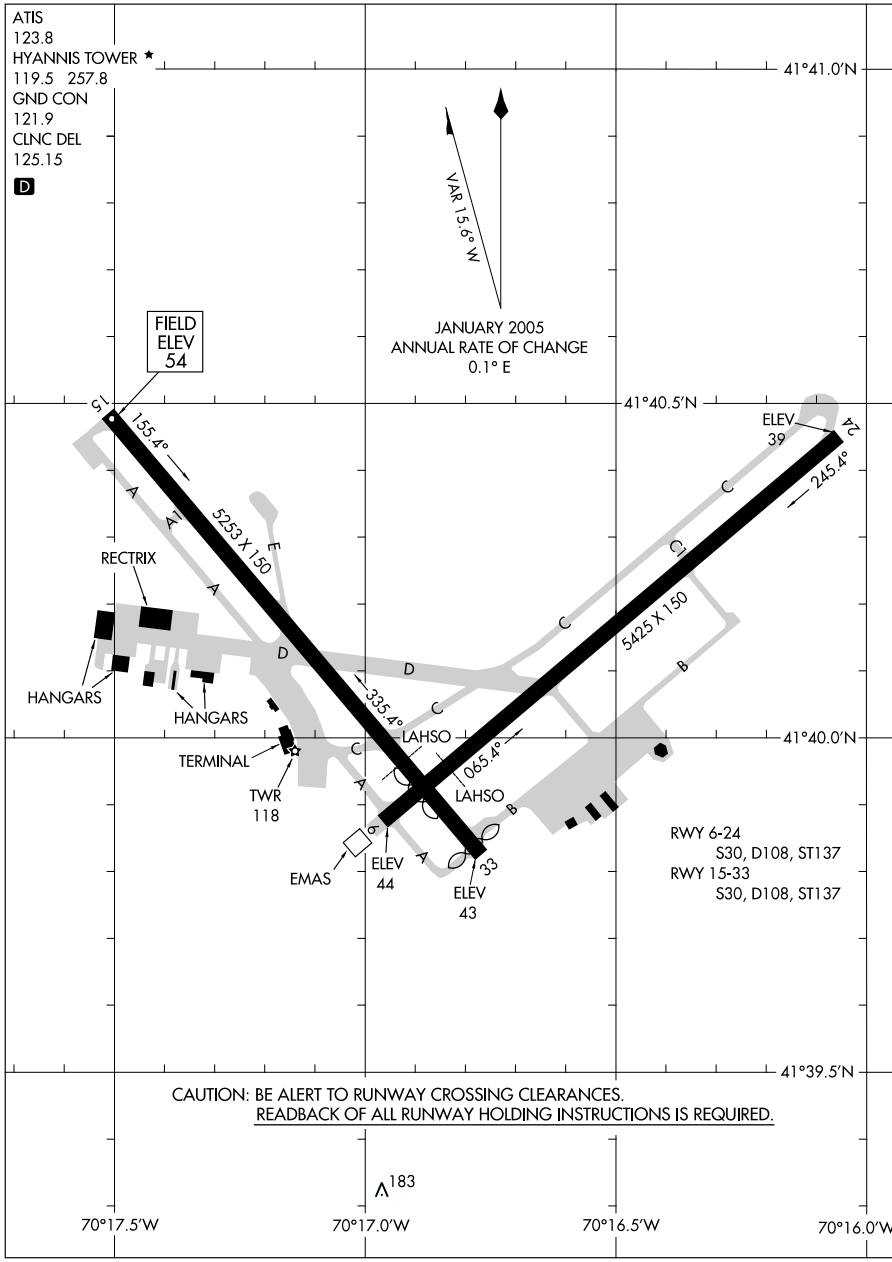
10042

AIRPORT DIAGRAM

HYANNIS/ BARNSTABLE MUNI-BOARDMAN/POLANDO FIELD (HYA)

AL-675 (FAA)

HYANNIS, MASSACHUSETTS



AIRPORT DIAGRAM

10042

HYANNIS, MASSACHUSETTS

HYANNIS/ BARNSTABLE MUNI-BOARDMAN/POLANDO FIELD (HYA)

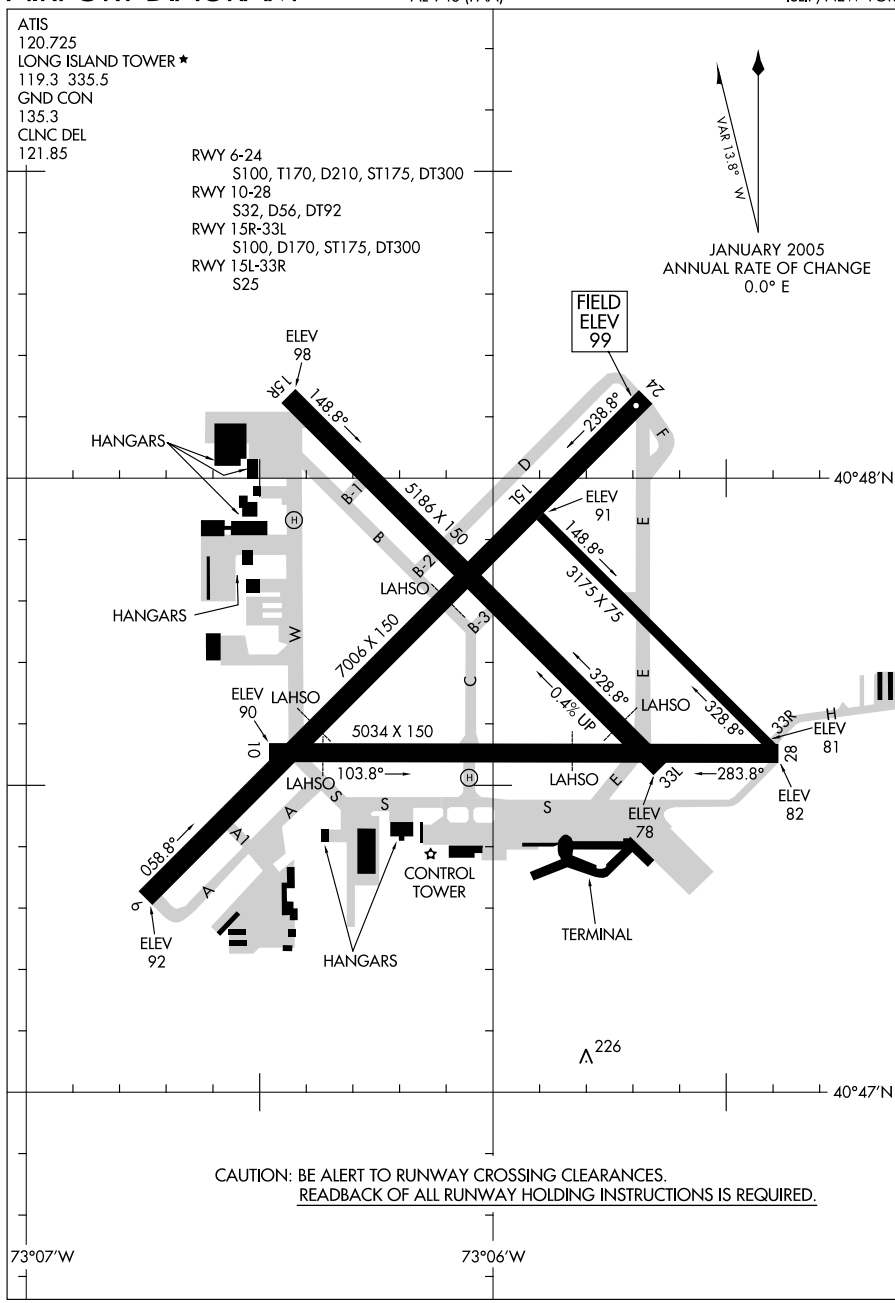
09183

AIRPORT DIAGRAM

ISLIP/ LONG ISLAND MACARTHUR (ISP)

ISLIP, NEW YORK

AL-948 (FAA)



AIRPORT DIAGRAM

09183

ISLIP, NEW YORK

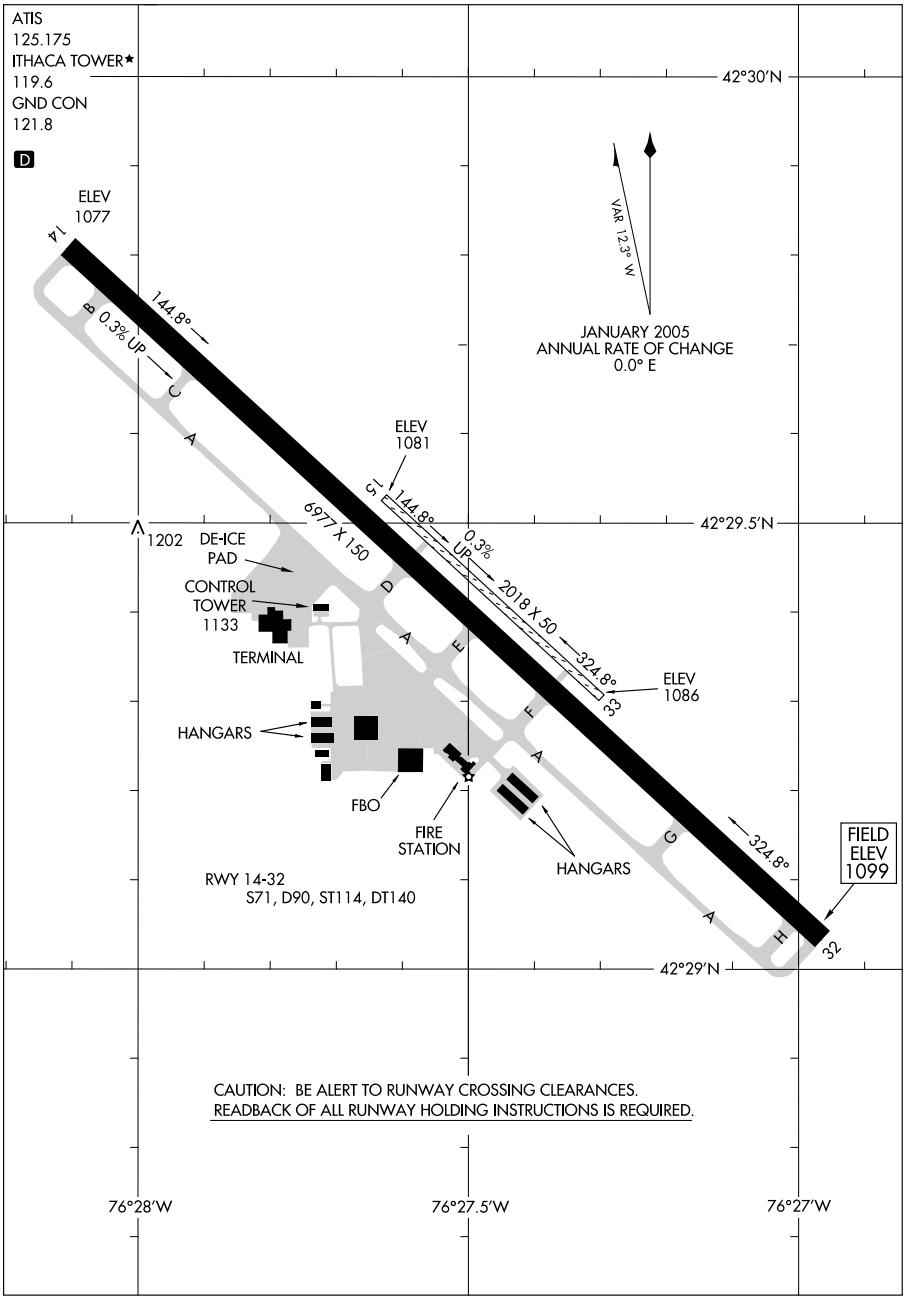
ISLIP/LONG ISLAND MACARTHUR (ISP)

09239

AIRPORT DIAGRAM

AL-779 (FAA)

ITHACA TOMPKINS RGNL (ITH)
ITHACA, NEW YORK



AIRPORT DIAGRAM

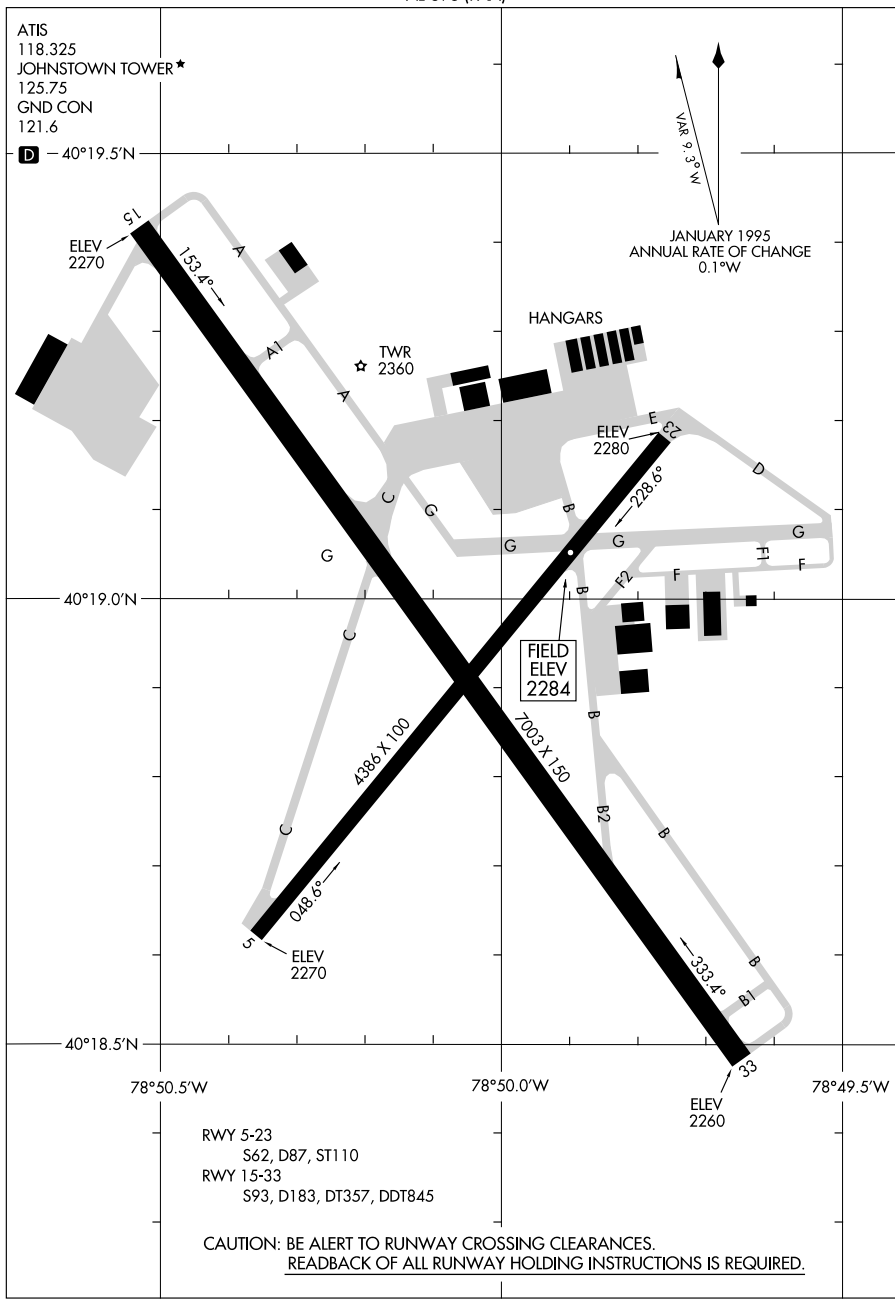
09239

ITHACA, NEW YORK
ITHACA TOMPKINS RGNL (ITH)

10098

AIRPORT DIAGRAM

JOHNSTOWN / JOHN MURTHA JOHNSTOWN-CAMBRIA COUNTY (JST)
AL-898 (FAA)
JOHNSTOWN, PENNSYLVANIA



AIRPORT DIAGRAM

JOHNSTOWN, PENNSYLVANIA
JOHNSTOWN / JOHN MURTHA JOHNSTOWN-CAMBRIA COUNTY (JST)

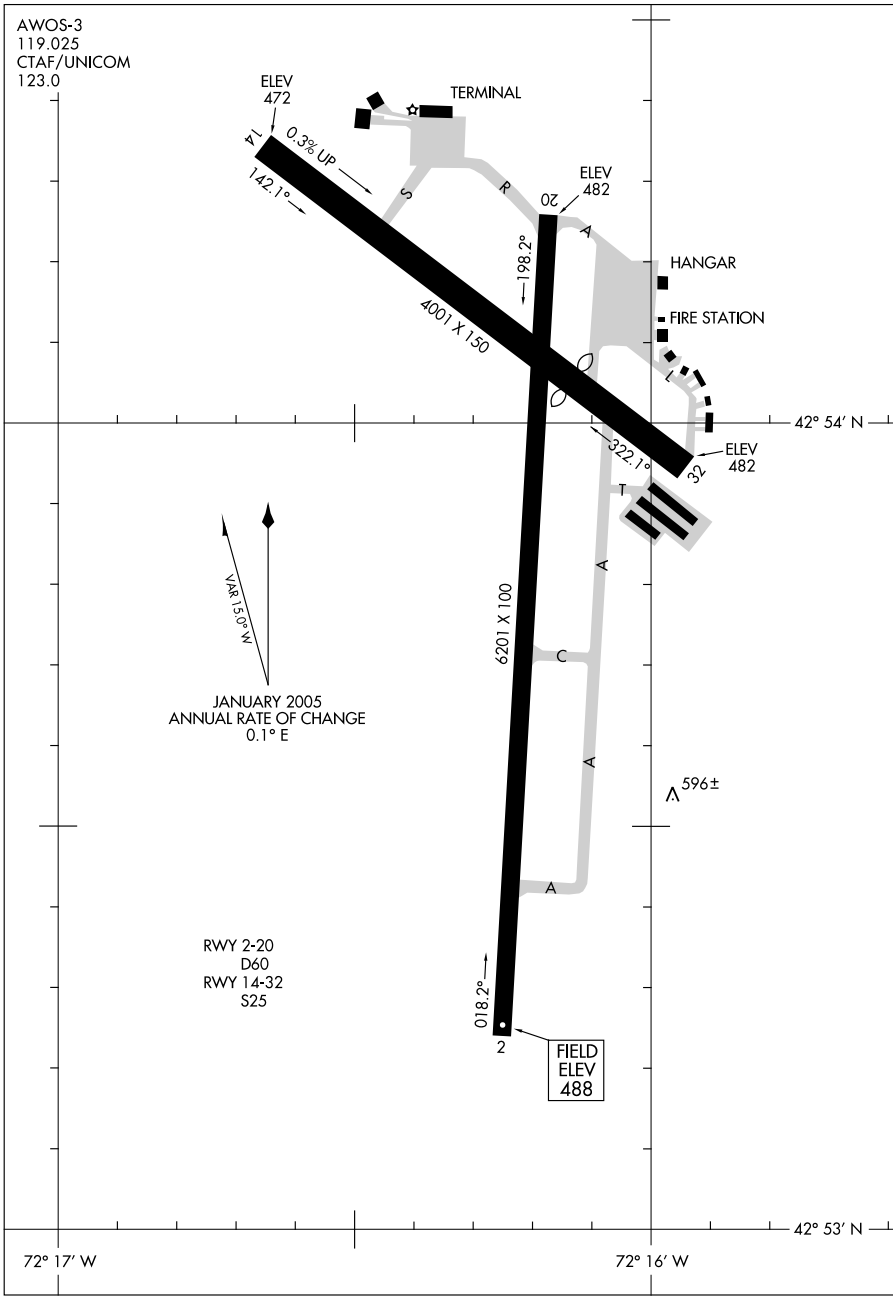
10098

10098

AIRPORT DIAGRAM

AL-868 (FAA)

KEENE / DILLANT-HOPKINS (EEN)
KEENE, NEW HAMPSHIRE



AIRPORT DIAGRAM

10098

KEENE, NEW HAMPSHIRE
KEENE / DILLANT-HOPKINS (EEN)

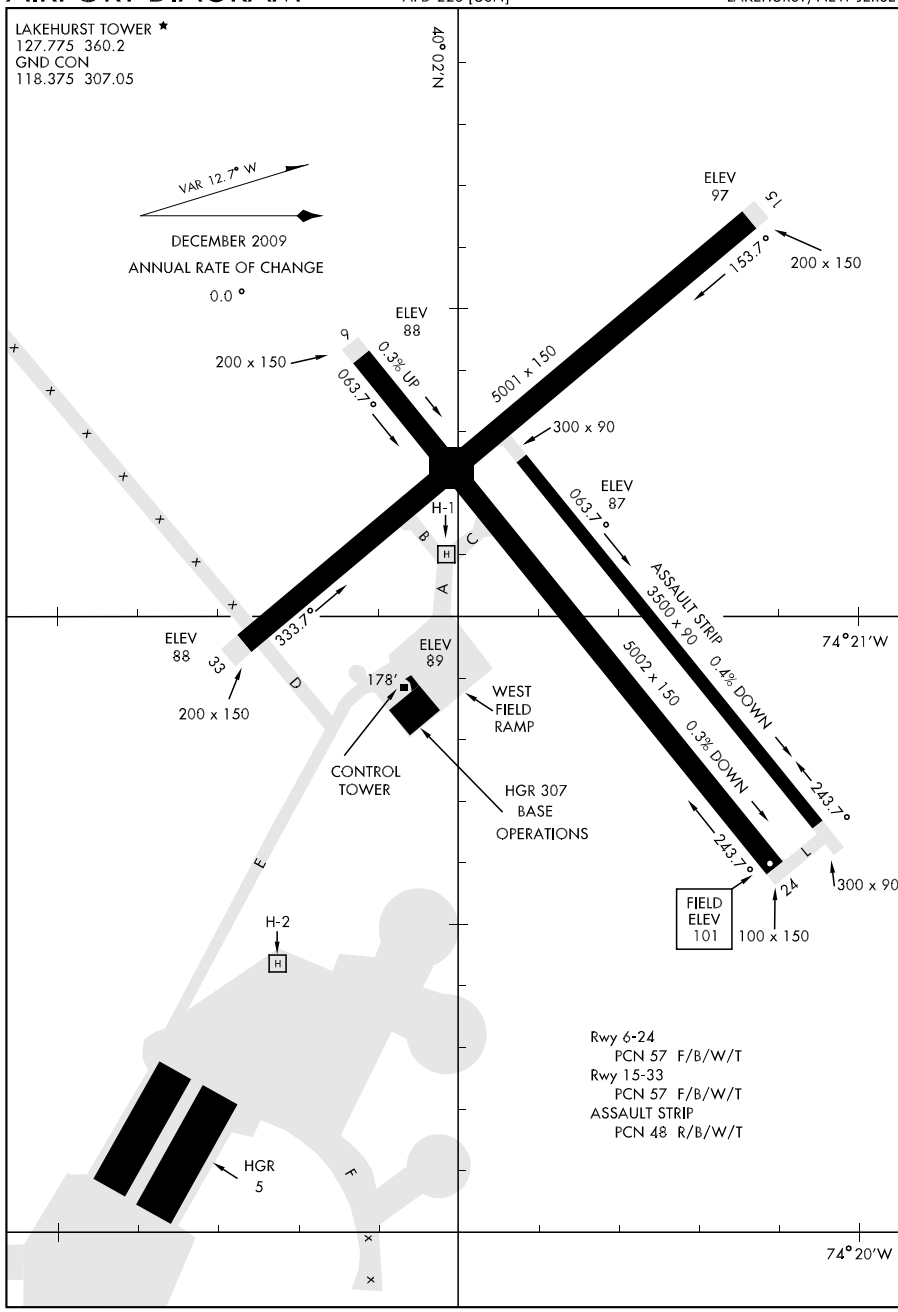
09351

AIRPORT DIAGRAM

LAKEHURST NAES (MAXFIELD FLD) (KNEL)

AFD-223 [USN]

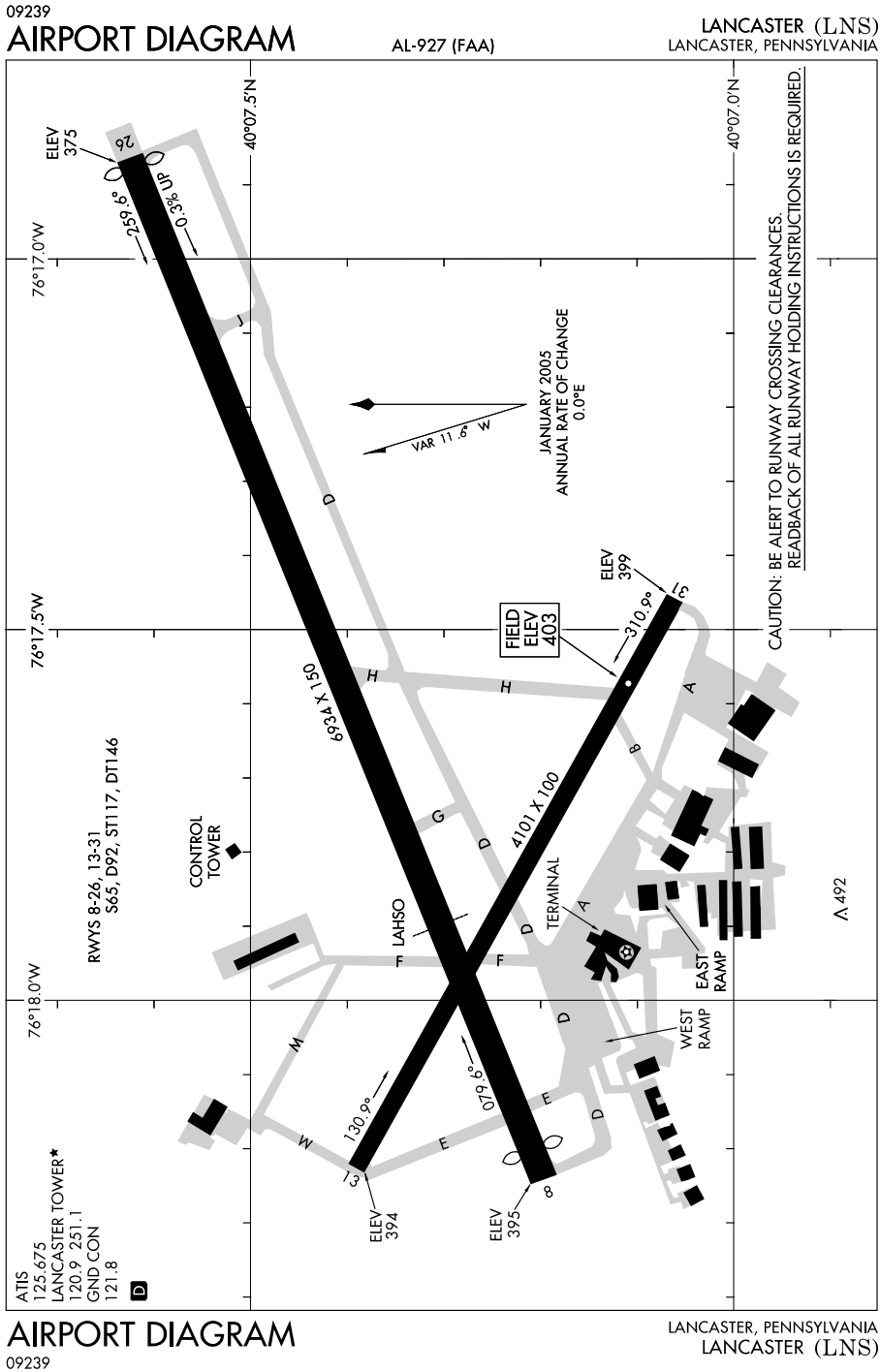
LAKEHURST, NEW JERSEY

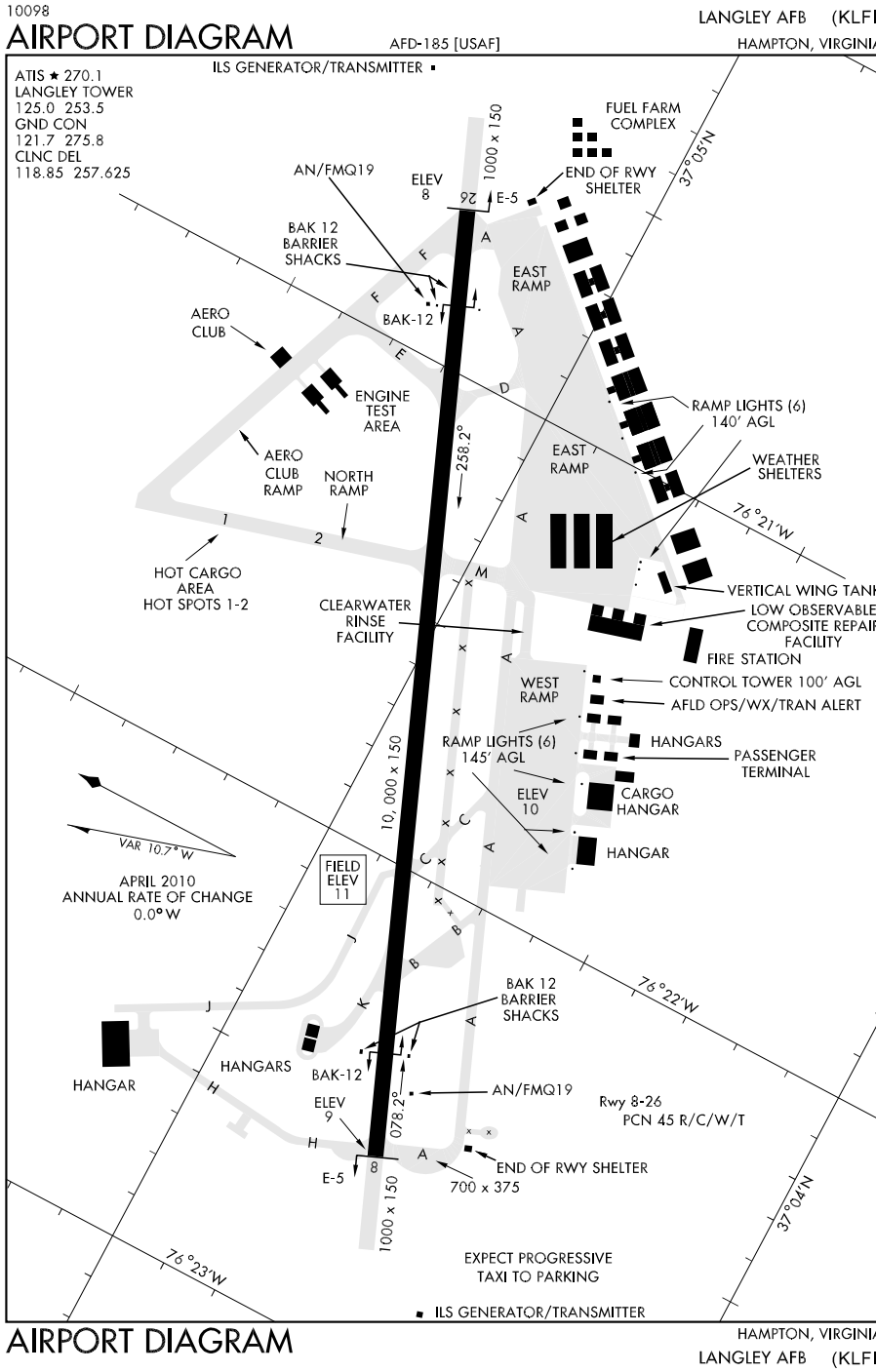


AIRPORT DIAGRAM

LAKEHURST, NEW JERSEY

LAKEHURST NAES (MAXFIELD FLD) (KNEL)


09239
AIRPORT DIAGRAM
AL-927 (FAA)
LANCASTER (LNS)
LANCASTER, PENNSYLVANIA
40°07.5'N
40°07.0'N
76°17.0'W
76°17.5'W
76°18.0'W
ELEV 375
26
259.6°
0.3% UP
VAR 11.6° W
JANUARY 2005
ANNUAL RATE OF CHANGE
0.0°E
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
ELEV 399
31
310.9°
FIELD ELEV 403
693 X 150
4101 X 100
RWYS 8-26, 13-31
S65, D92, ST117, DT146
CONTROL TOWER
LAHSO
TERMINAL
EAST RAMP
WEST RAMP
492
130.9°
079.6°
13
8
ELEV 394
ELEV 395
ATIS
125.675
LANCASTER TOWER*
120.9 251.1
GND CON
121.8
D
AIRPORT DIAGRAM
09239
LANCASTER, PENNSYLVANIA
LANCASTER (LNS)

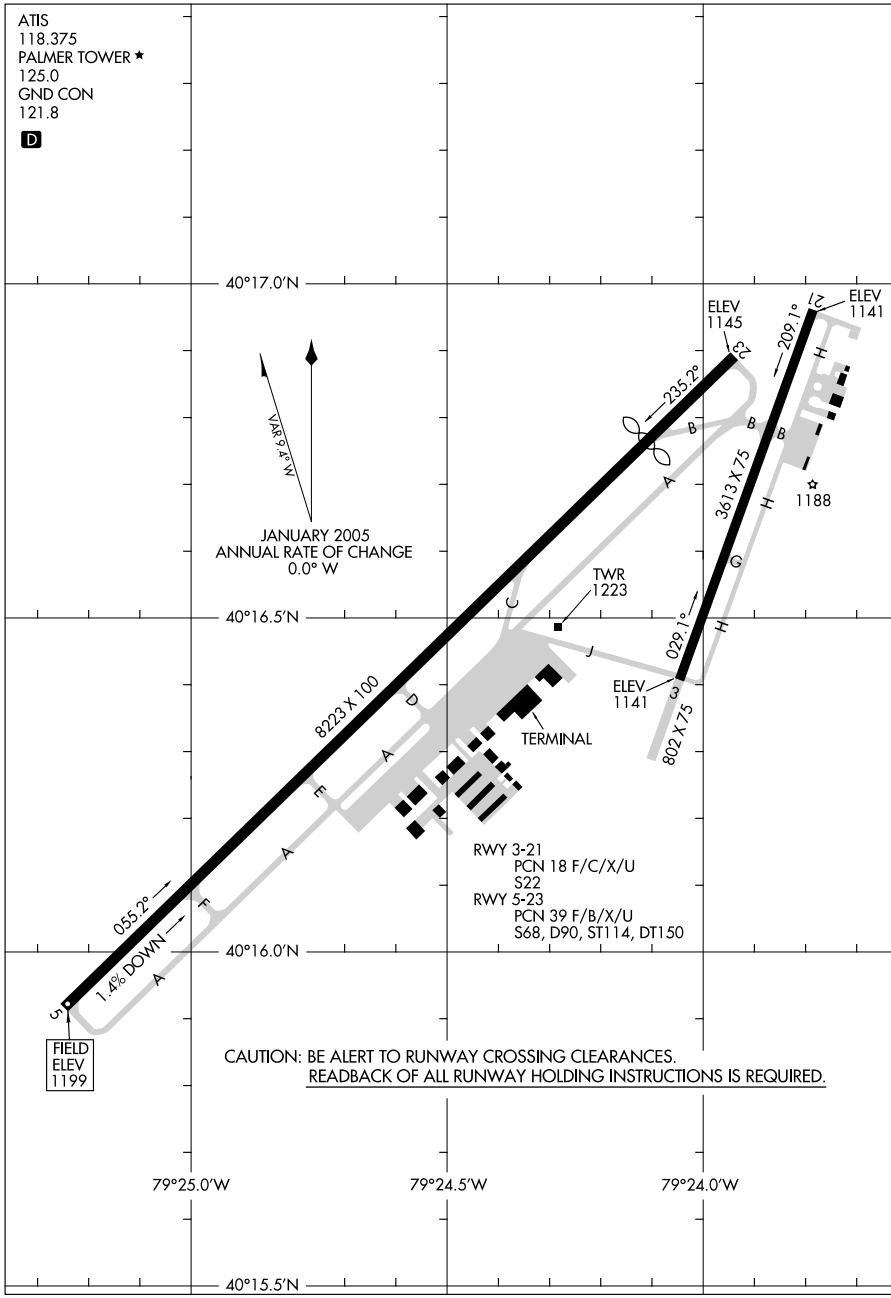

10098
AIRPORT DIAGRAM
AFD-185 [USAF]
LANGLEY AFB (KLFI)
HAMPTON, VIRGINIA
ILS GENERATOR/TRANSMITTER
ATIS ★ 270.1
LANGLEY TOWER
125.0 253.5
GND CON
121.7 275.8
CLNC DEL
118.85 257.625
FUEL FARM COMPLEX
END OF RWY SHELTER
37°05'N
AN/FMQ19
ELEV 8
1000 x 150
26
E-5
BAK 12 BARRIER SHACKS
EAST RAMP
BAK-12
AERO CLUB
ENGINE TEST AREA
RAMP LIGHTS (6) 140' AGL
AERO CLUB RAMP
NORTH RAMP
258.2°
EAST RAMP
WEATHER SHELTERS
76°21'W
HOT CARGO AREA HOT SPOTS 1-2
CLEARWATER RINSE FACILITY
VERTICAL WING TANK
LOW OBSERVABLE COMPOSITE REPAIR FACILITY
FIRE STATION
WEST RAMP
CONTROL TOWER 100' AGL
AFLD OPS/WX/TRAN ALERT
RAMP LIGHTS (6) 145' AGL
HANGARS
PASSENGER TERMINAL
10, 000 x 150
ELEV 10
CARGO HANGAR
HANGAR
VAR 10.7°W
APRIL 2010
ANNUAL RATE OF CHANGE
0.0° W
FIELD ELEV 11
BAK 12 BARRIER SHACKS
76°22'W
HANGAR
HANGARS
BAK-12
AN/FMQ19
ELEV 9
078.2°
Rwy 8-26
PCN 45 R/C/W/T
E-5
8
END OF RWY SHELTER
700 x 375
1000 x 150
37°04'N
76°23'W
EXPECT PROGRESSIVE TAXI TO PARKING
ILS GENERATOR/TRANSMITTER
AIRPORT DIAGRAM
HAMPTON, VIRGINIA
LANGLEY AFB (KLFI)

10098

AIRPORT DIAGRAM

AL-5125 (FAA)

LATROBE/ ARNOLD PALMER RGNL (LBE)
LATROBE, PENNSYLVANIA



AIRPORT DIAGRAM

LATROBE, PENNSYLVANIA
LATROBE/ARNOLD PALMER RGNL (LBE)

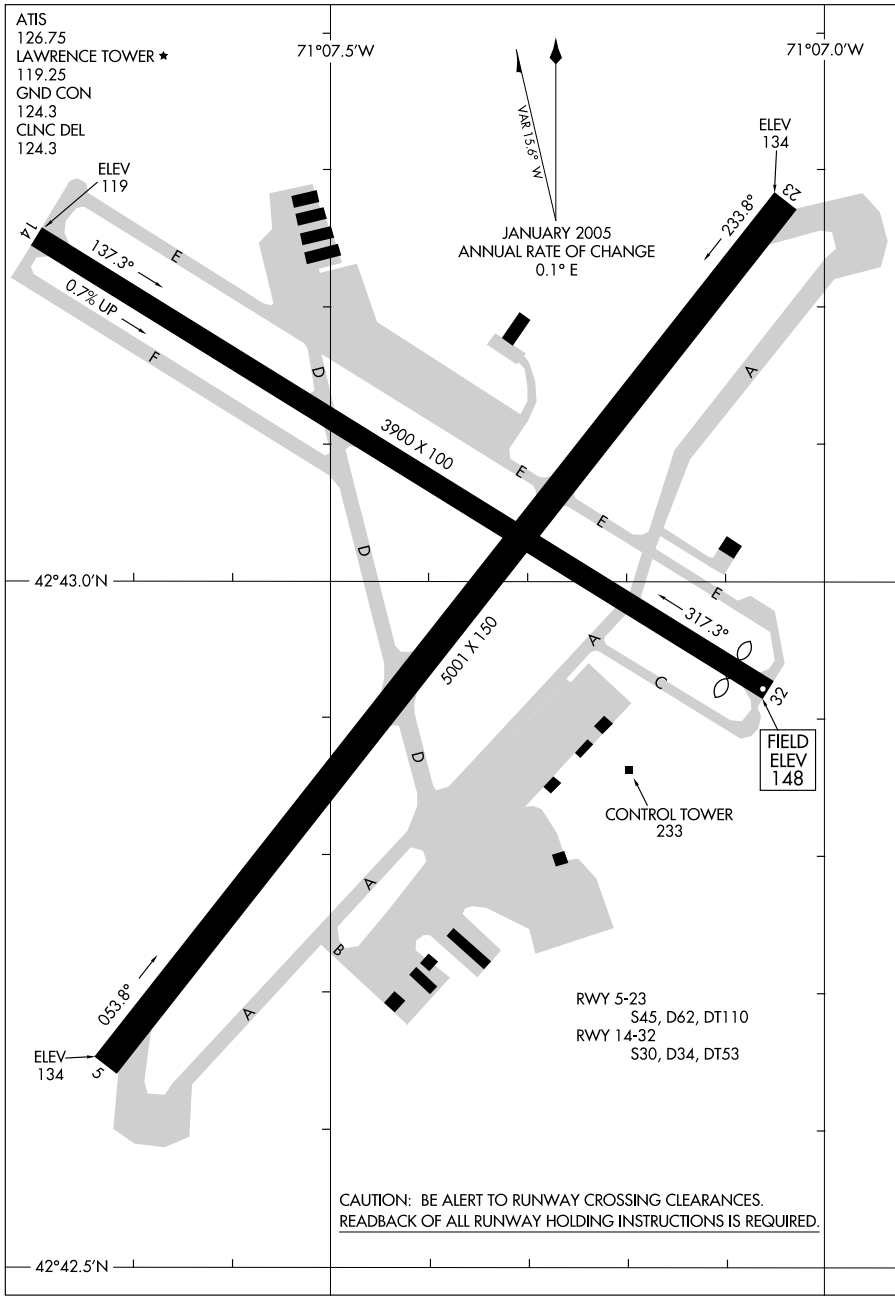
10098

09015

AIRPORT DIAGRAM

AL-654 (FAA)

LAWRENCE MUNI (LWM)
LAWRENCE, MASSACHUSETTS



AIRPORT DIAGRAM

09015

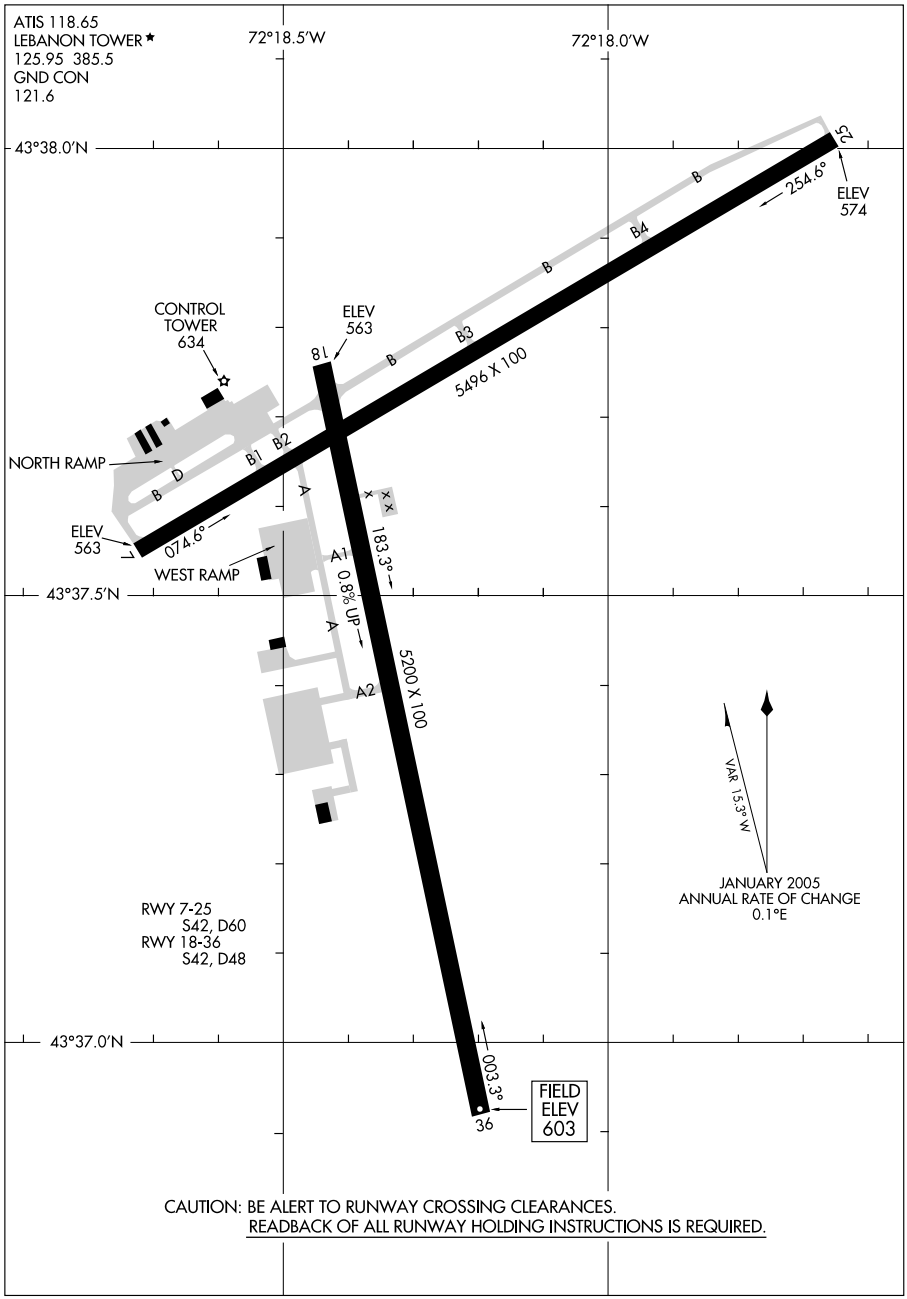
LAWRENCE, MASSACHUSETTS
LAWRENCE MUNI (LWM)

08269

AIRPORT DIAGRAM

AL-859 (FAA)

LEBANON MUNI (LEB)
LEBANON, NEW HAMPSHIRE



AIRPORT DIAGRAM

08269

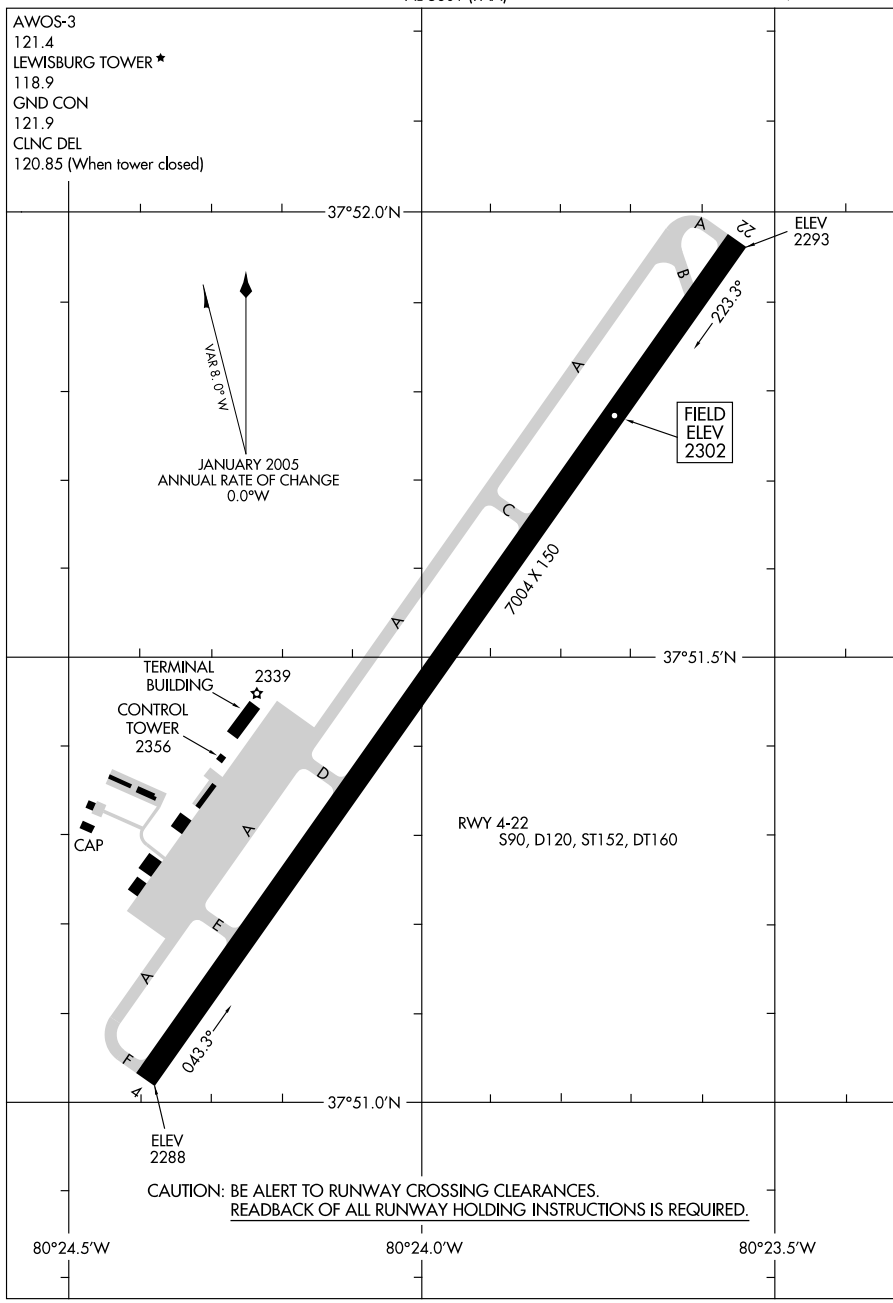
LEBANON, NEW HAMPSHIRE
LEBANON MUNI (LEB)

06271

AIRPORT DIAGRAM

LEWISBURG/ GREENBRIER VALLEY (LWB)
LEWISBURG, WEST VIRGINIA

AL-5601 (FAA)



AIRPORT DIAGRAM

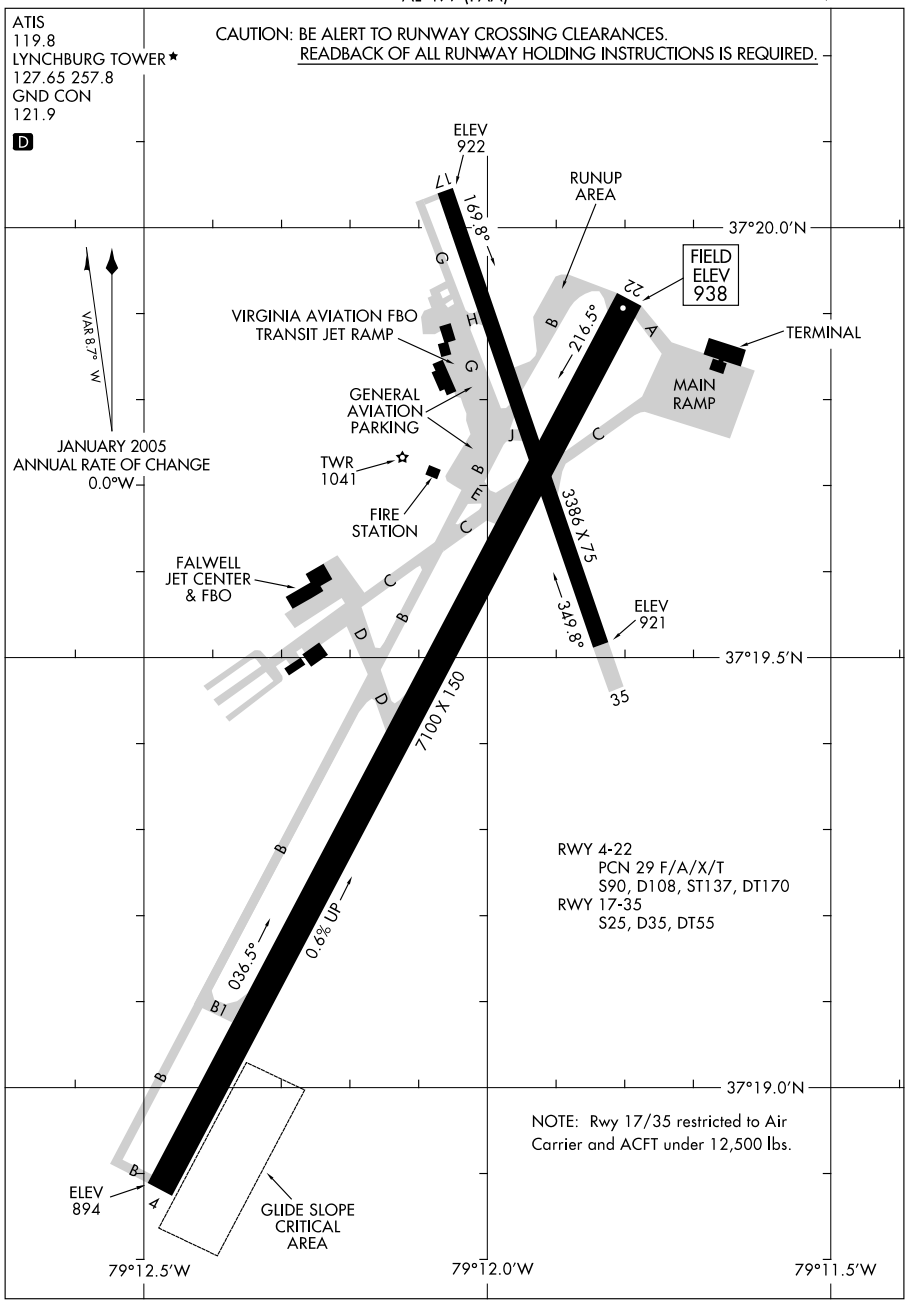
06271

LEWISBURG, WEST VIRGINIA
LEWISBURG/ GREENBRIER VALLEY (LWB)

09351

AIRPORT DIAGRAM

LYNCHBURG RGNL/PRESTON GLENN FIELD (LYH)
AL-499 (FAA)
LYNCHBURG, VIRGINIA



AIRPORT DIAGRAM

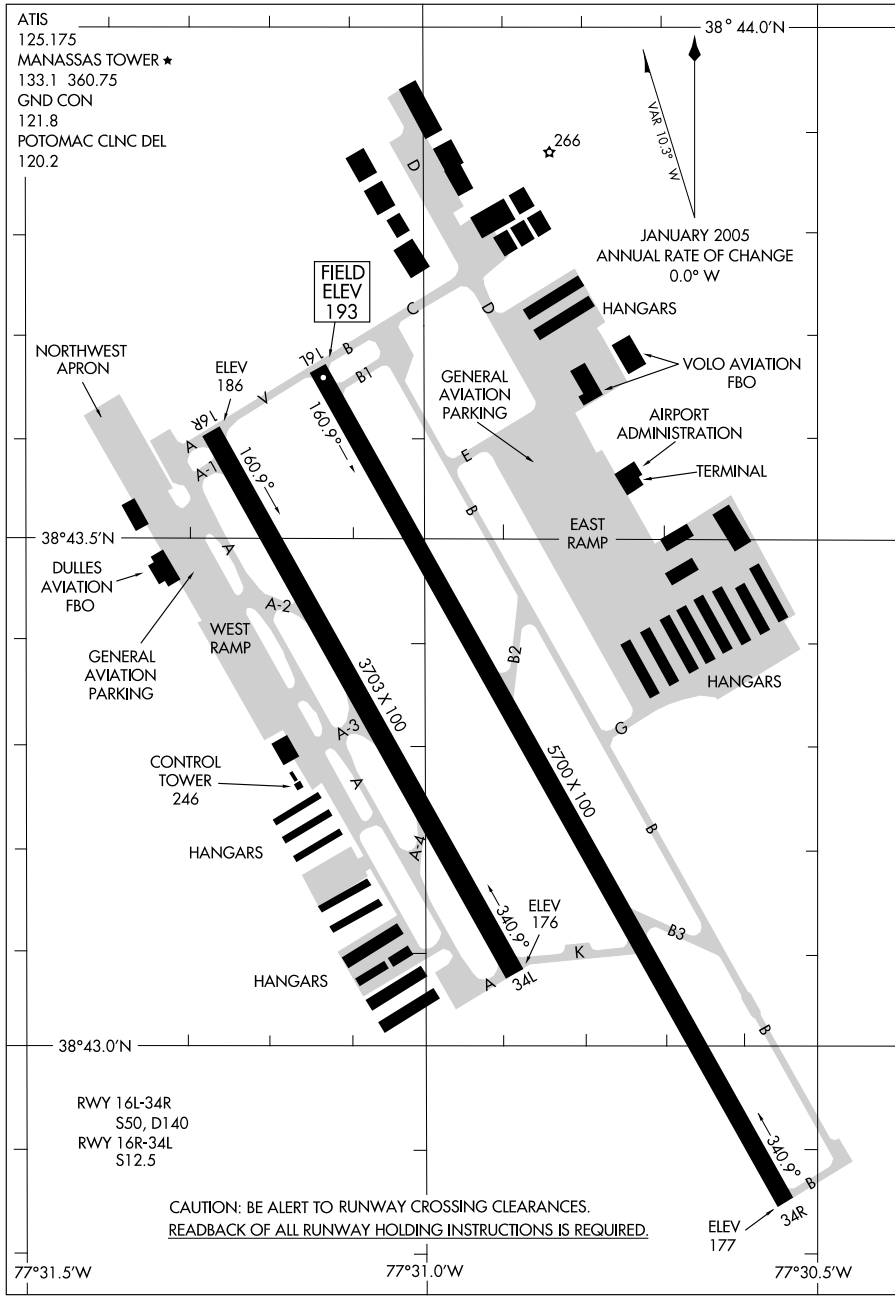
LYNCHBURG, VIRGINIA
LYNCHBURG RGNL/PRESTON GLENN FIELD (LYH)

09351

09015

AIRPORT DIAGRAM

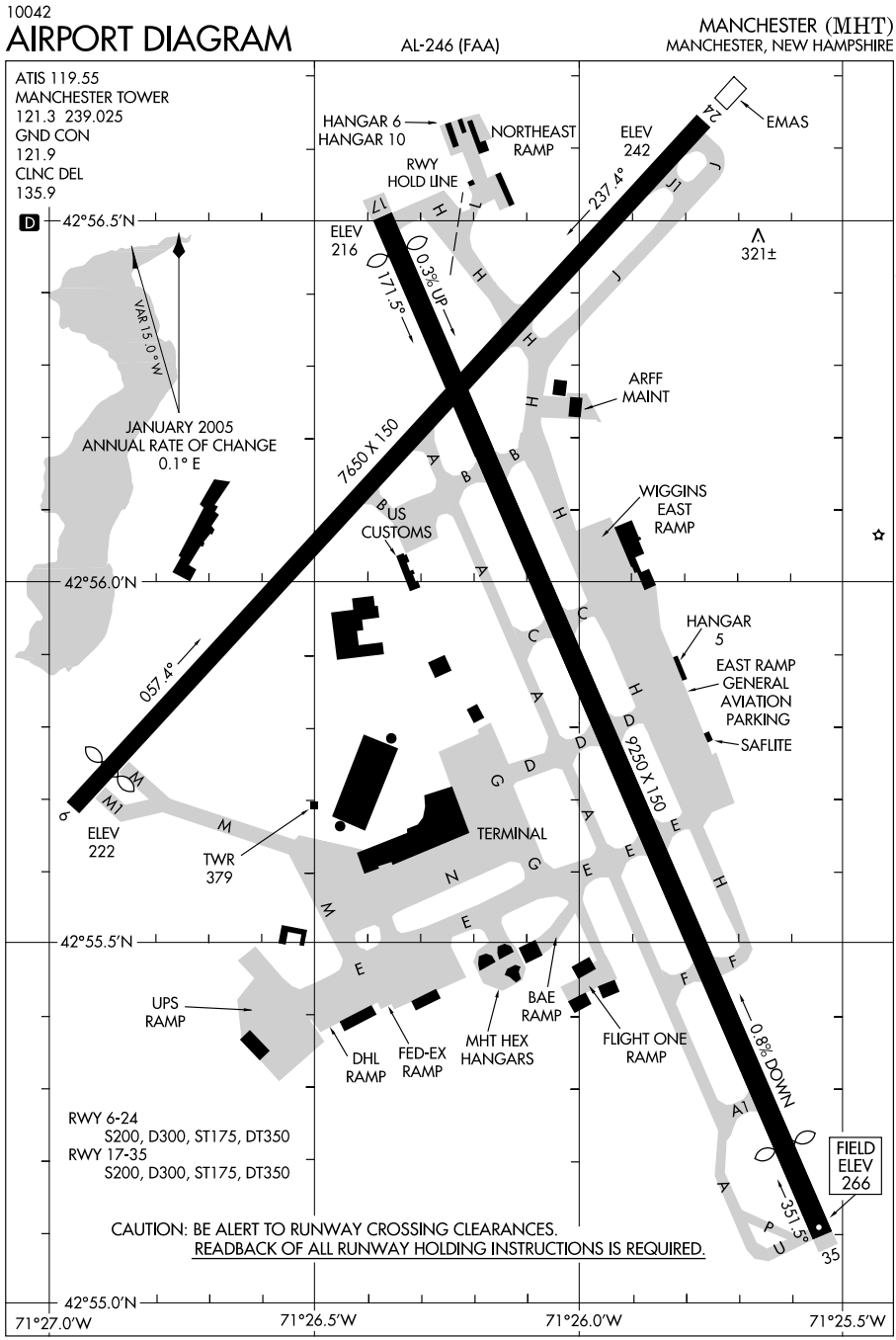
MANASSAS RNGL/HARRY P. DAVIS FIELD (HEF)
AL-5326 (FAA)
MANASSAS, VIRGINIA



AIRPORT DIAGRAM

09015

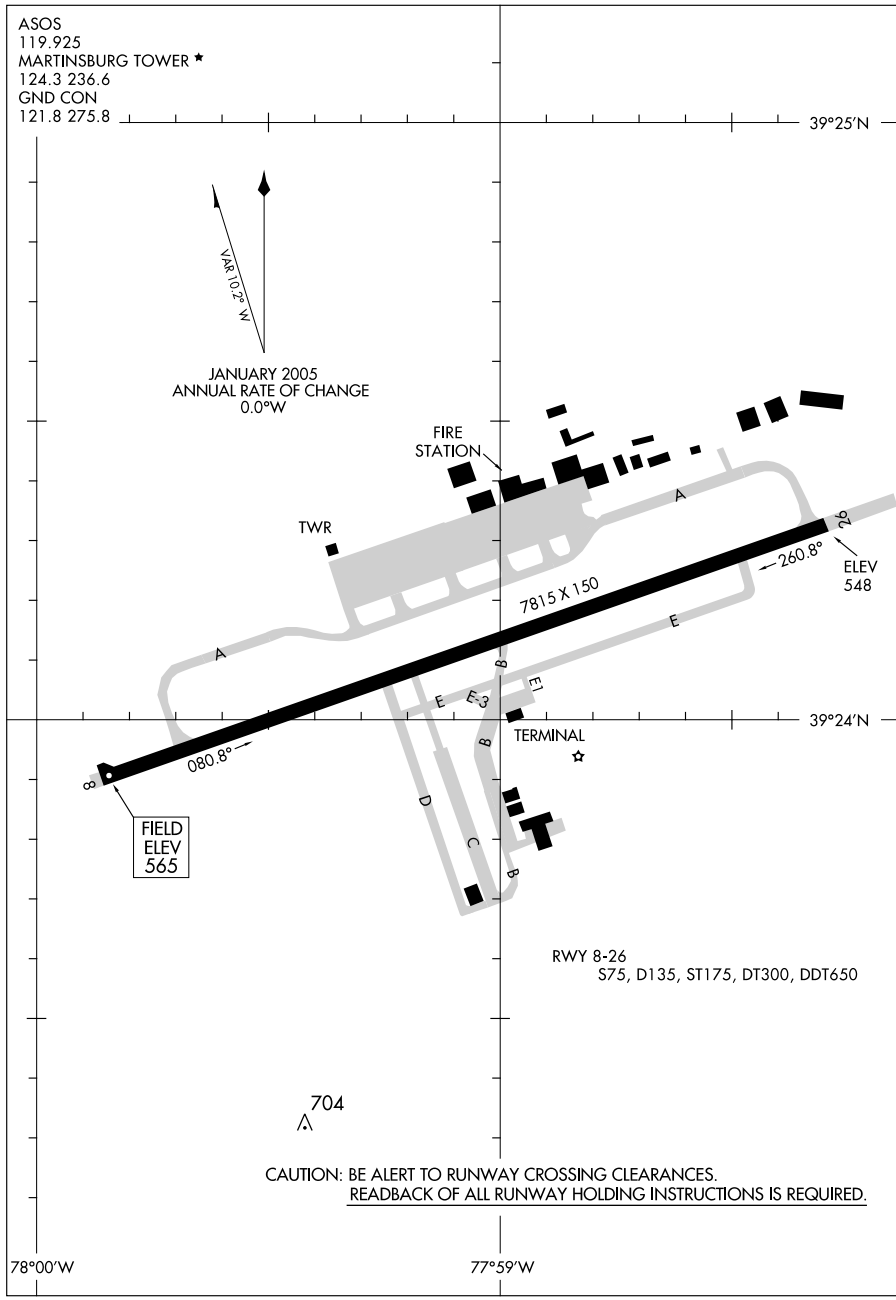
MANASSAS, VIRGINIA
MANASSAS RNGL/HARRY P. DAVIS FIELD (HEF)


10042
AIRPORT DIAGRAM
AL-246 (FAA)
MANCHESTER (MHT)
MANCHESTER, NEW HAMPSHIRE
ATIS 119.55
MANCHESTER TOWER
121.3 239.025
GND CON
121.9
CLNC DEL
135.9
HANGAR 6
HANGAR 10
NORTHEAST RAMP
ELEV 242
EMAS
RWY HOLD LINE
237.4°
ELEV 216
171.5°
0.3% UP
321±
VAR 15.0°W
JANUARY 2005
ANNUAL RATE OF CHANGE
0.1° E
ARFF MAINT
7650 X 150
WIGGINS EAST RAMP
US CUSTOMS
42°56.0'N
HANGAR 5
EAST RAMP
GENERAL AVIATION PARKING
SAFLITE
057.4°
9250 X 150
ELEV 222
TWR 379
TERMINAL
42°55.5'N
UPS RAMP
DHL RAMP
FED-EX RAMP
MHT HEX HANGARS
BAE RAMP
FLIGHT ONE RAMP
0.8% DOWN
FIELD ELEV 266
351.5°
RWY 6-24
S200, D300, ST175, DT350
RWY 17-35
S200, D300, ST175, DT350
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
42°55.0'N
71°27.0'W
71°26.5'W
71°26.0'W
71°25.5'W
AIRPORT DIAGRAM
10042
MANCHESTER, NEW HAMPSHIRE
MANCHESTER (MHT)

10098

AIRPORT DIAGRAM

MARTINSBURG/
EASTERN WEST VIRGINIA RGNL/SHEPHERD FIELD (MRB)
AL-249 (FAA) MARTINSBURG, WEST VIRGINIA



AIRPORT DIAGRAM
10098
MARTINSBURG/
EASTERN WEST VIRGINIA RGNL/SHEPHERD FIELD (MRB)
MARTINSBURG, WEST VIRGINIA

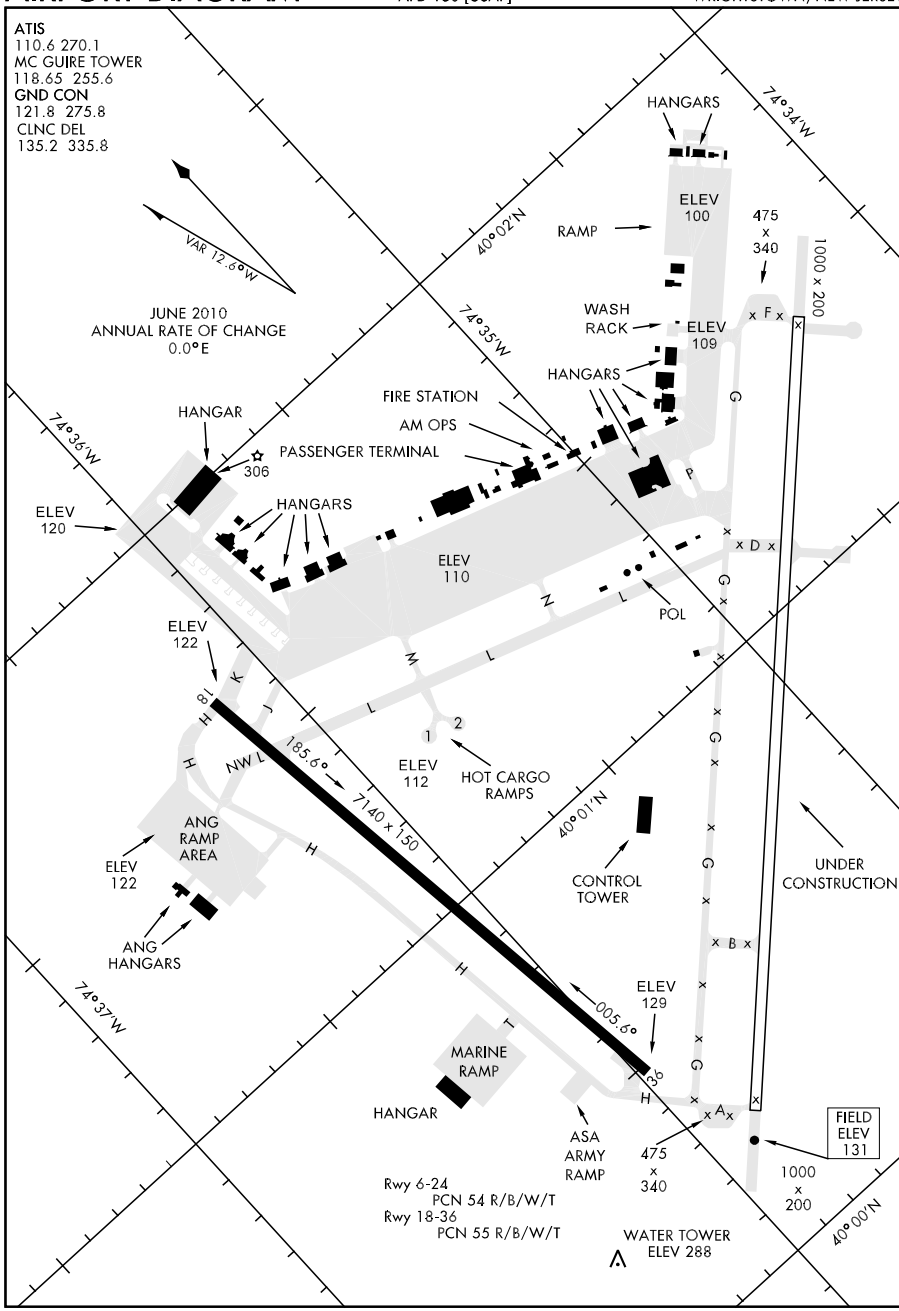
10154

AIRPORT DIAGRAM

MC GUIRE AFB (KWRI)

AFD-150 [USAF]

WRIGHTSTOWN, NEW JERSEY



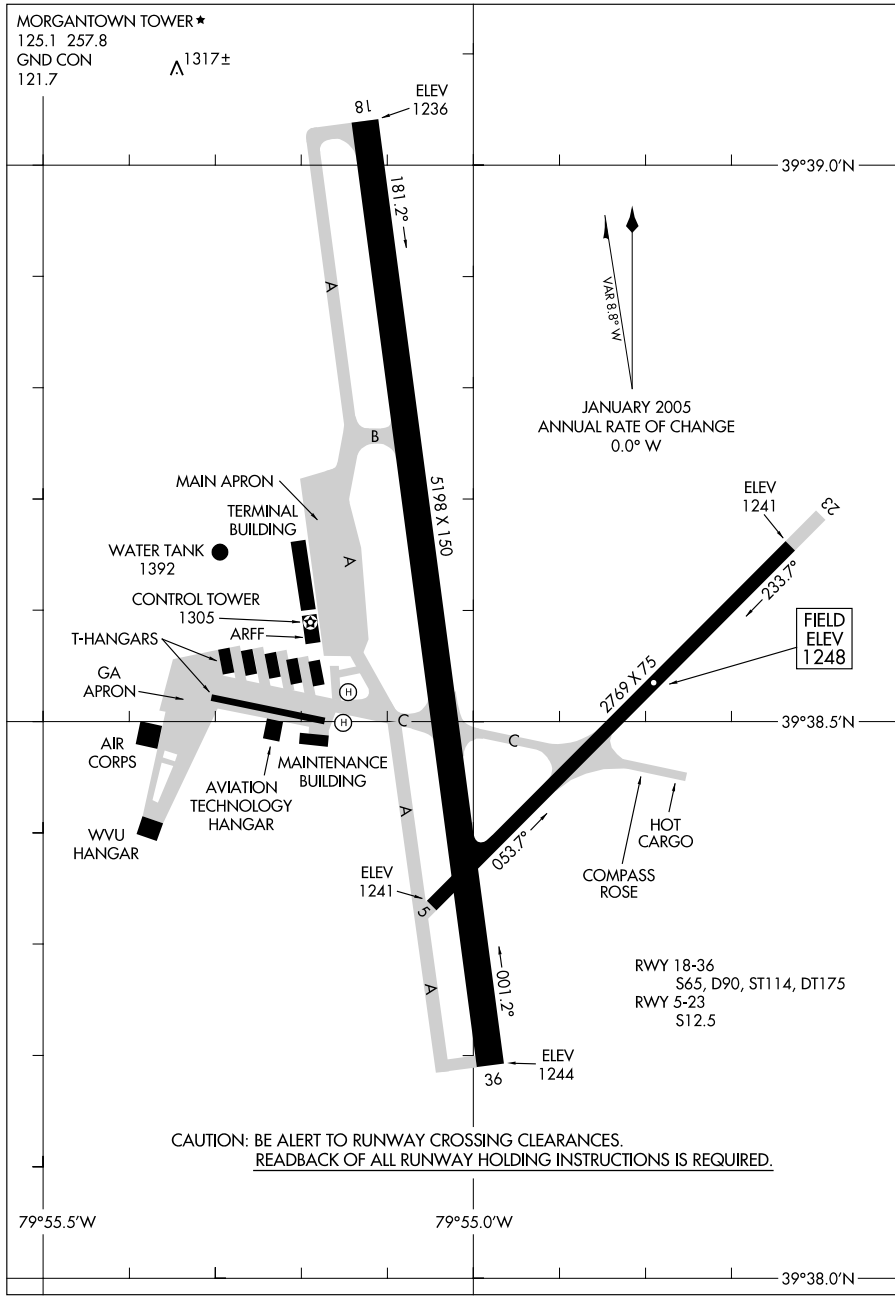
AIRPORT DIAGRAM

WRIGHTSTOWN, NEW JERSEY
MC GUIRE AFB (KWRI)

06271

AIRPORT DIAGRAM

MORGANTOWN MUNI-WALTER L. BILL HART FIELD (MGW)
AL-479 (FAA)
MORGANTOWN, WEST VIRGINIA



AIRPORT DIAGRAM

06271

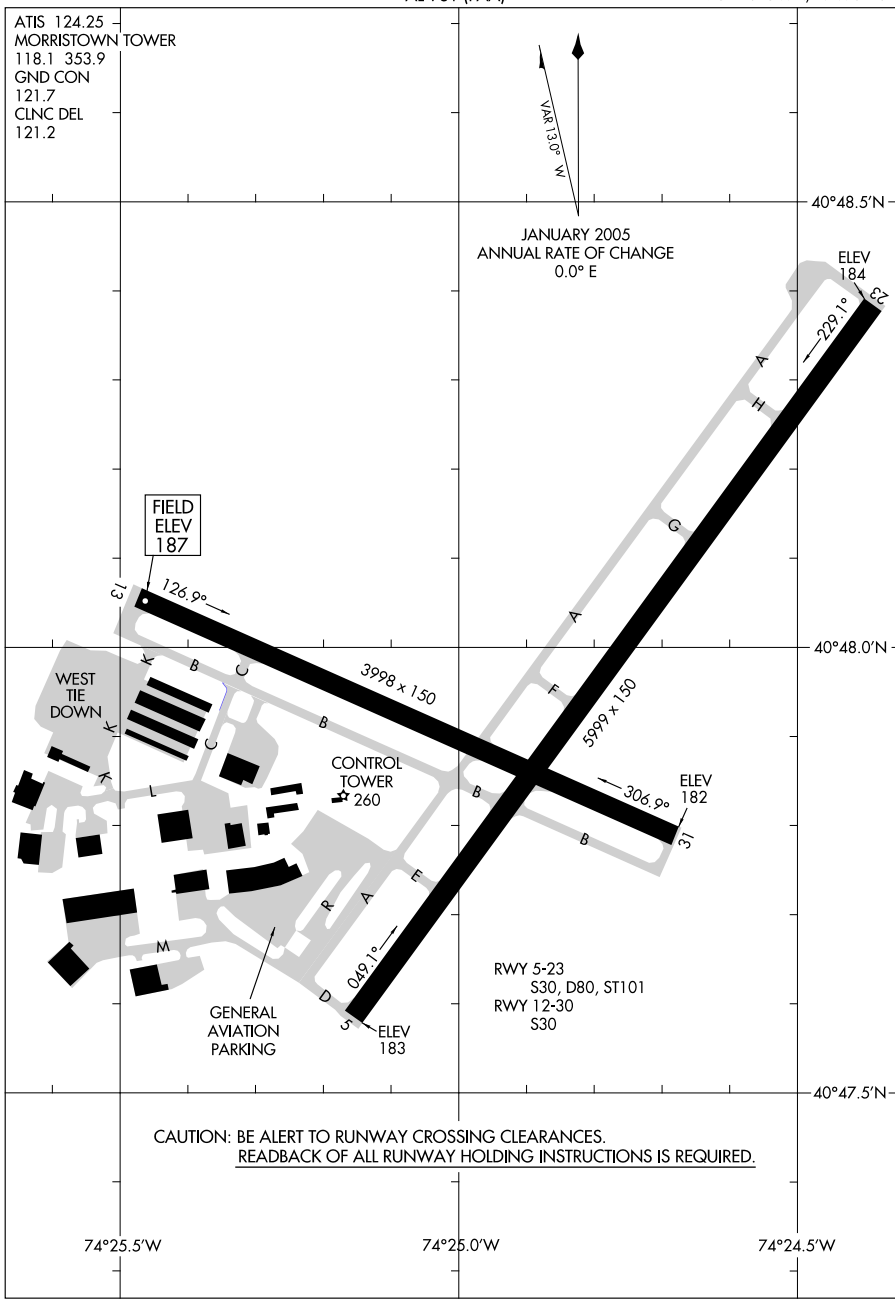
MORGANTOWN, WEST VIRGINIA
MORGANTOWN MUNI-WALTER L. BILL HART FIELD (MGW)

06327

AIRPORT DIAGRAM

AL-931 (FAA)

MORRISTOWN MUNI (MMU)
MORRISTOWN, NEW JERSEY



AIRPORT DIAGRAM

06327

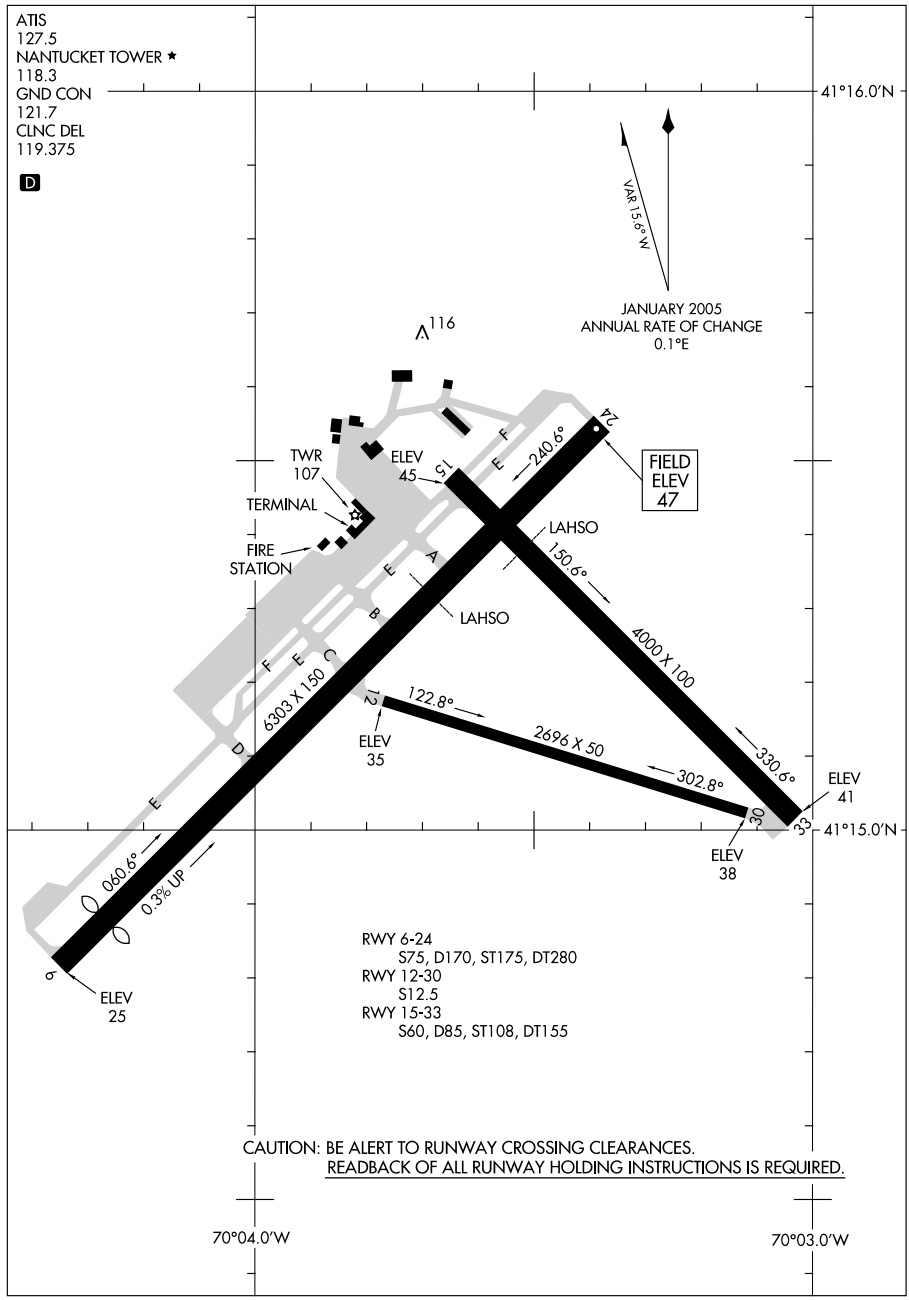
MORRISTOWN, NEW JERSEY
MORRISTOWN MUNI (MMU)

10154

AIRPORT DIAGRAM

AL-659 (FAA)

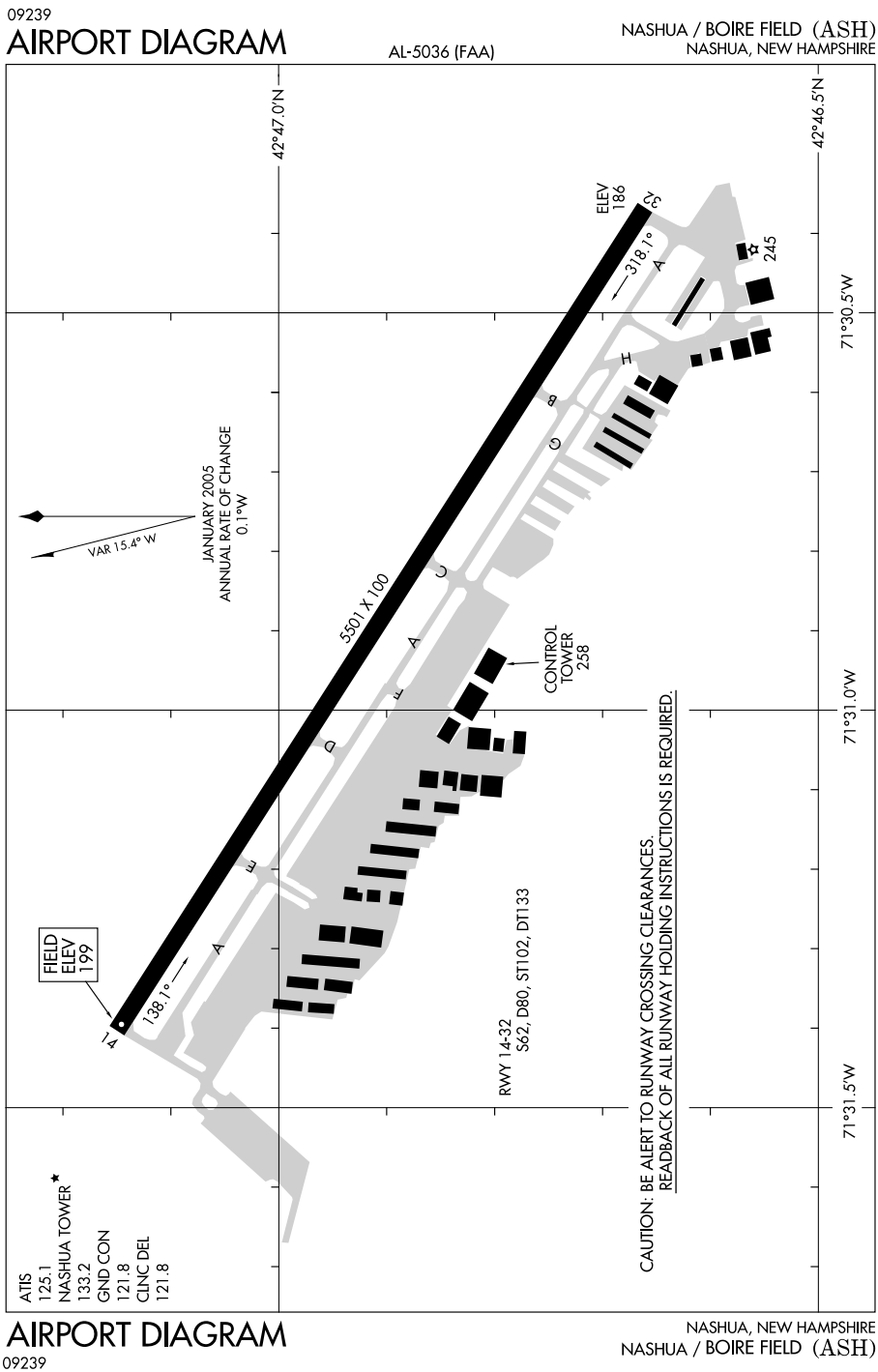
NANTUCKET MEMORIAL (ACK)
NANTUCKET, MASSACHUSETTS



AIRPORT DIAGRAM

NANTUCKET, MASSACHUSETTS
NANTUCKET MEMORIAL (ACK)

10154

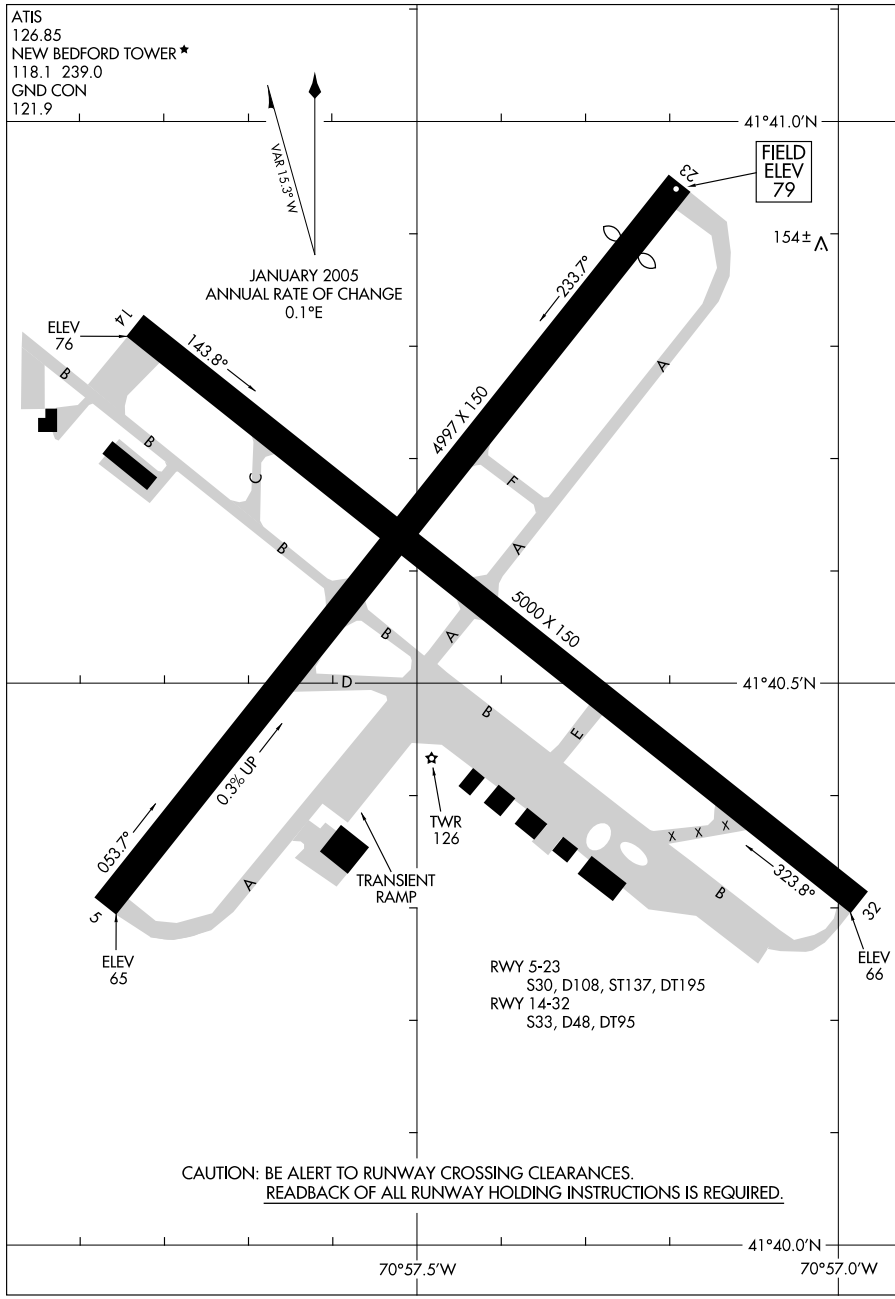

09239
AIRPORT DIAGRAM
AL-5036 (FAA)
NASHUA / BOIRE FIELD (ASH)
NASHUA, NEW HAMPSHIRE
42°47.0'N
42°46.5'N
71°30.5'W
71°31.0'W
71°31.5'W
ELEV 186
318.1°
245
VAR 15.4° W
JANUARY 2005
ANNUAL RATE OF CHANGE
0.1°W
5501 X 100
CONTROL TOWER 258
FIELD ELEV 199
138.1°
RWY 14-32
S62, D80, ST102, DT133
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
ATIS 125.1
NASHUA TOWER 133.2
GND CON 121.8
CLNC DEL 121.8
AIRPORT DIAGRAM
09239
NASHUA, NEW HAMPSHIRE
NASHUA / BOIRE FIELD (ASH)

10042

AIRPORT DIAGRAM

AL-644 (FAA)

NEW BEDFORD RGNL (EWB)
NEW BEDFORD, MASSACHUSETTS



AIRPORT DIAGRAM
10042

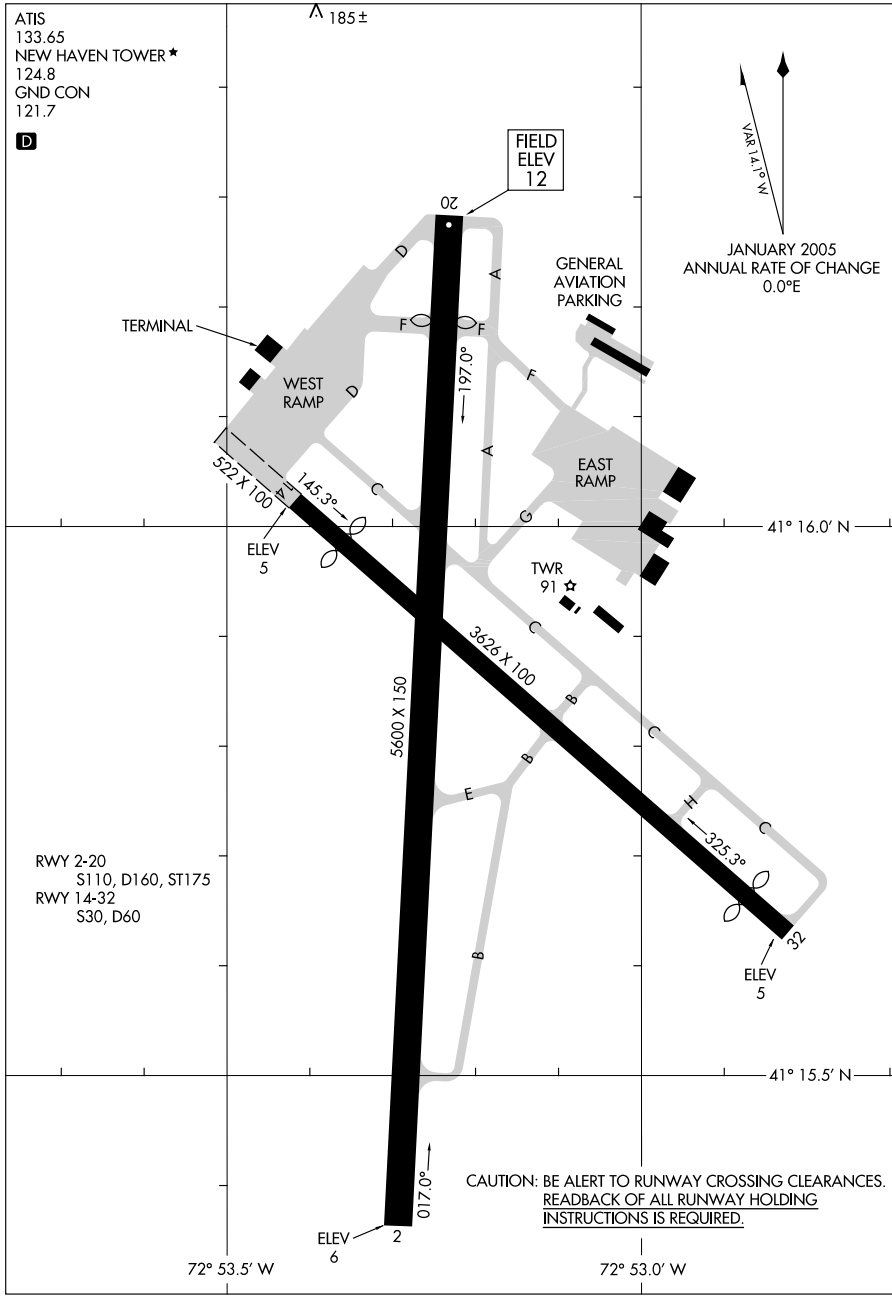
NEW BEDFORD, MASSACHUSETTS
NEW BEDFORD RGNL (EWB)

09183

AIRPORT DIAGRAM

AL-671 (FAA)

NEW HAVEN/TWEED-NEW HAVEN (HVN)
NEW HAVEN, CONNECTICUT



AIRPORT DIAGRAM

09183

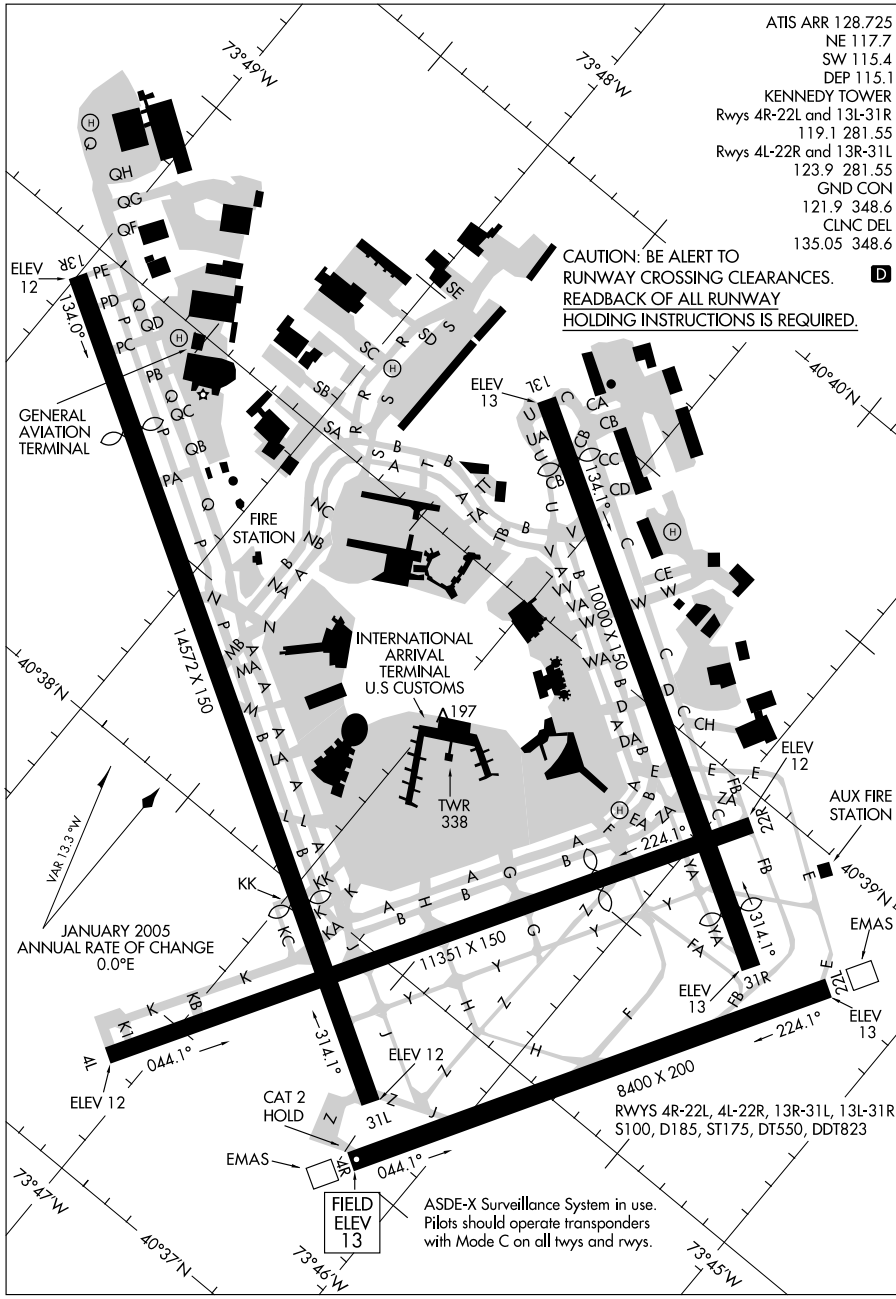
NEW HAVEN, CONNECTICUT
NEW HAVEN/TWEED-NEW HAVEN (HVN)

10098

AIRPORT DIAGRAM

AL-610 (FAA)

NEW YORK / JOHN F. KENNEDY INTL (JFK)
NEW YORK, NEW YORK



AIRPORT DIAGRAM

10098

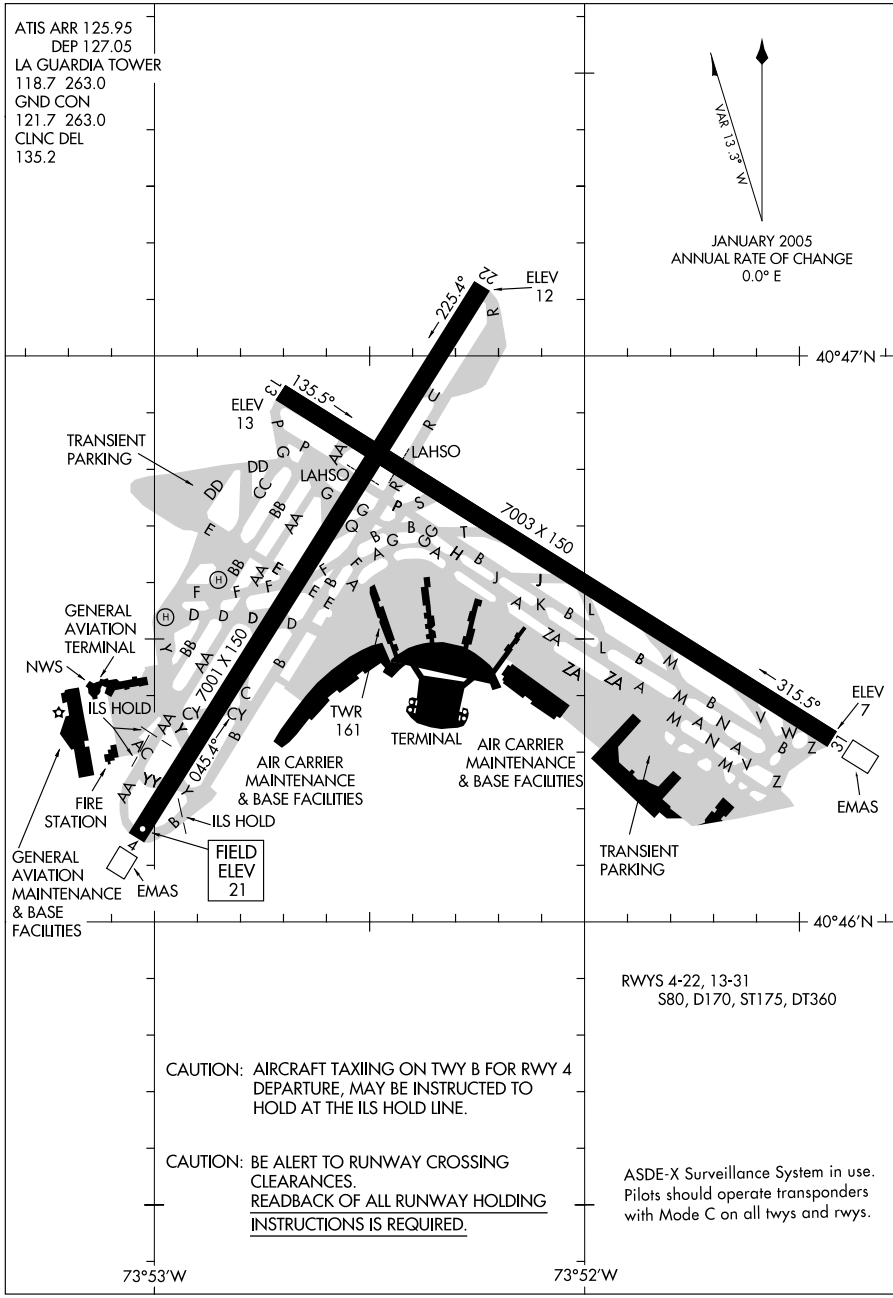
NEW YORK, NEW YORK
NEW YORK / JOHN F. KENNEDY INTL (JFK)

10042

AIRPORT DIAGRAM

AL-289 (FAA)

NEW YORK/LA GUARDIA (LGA)
NEW YORK, NEW YORK



AIRPORT DIAGRAM

10042

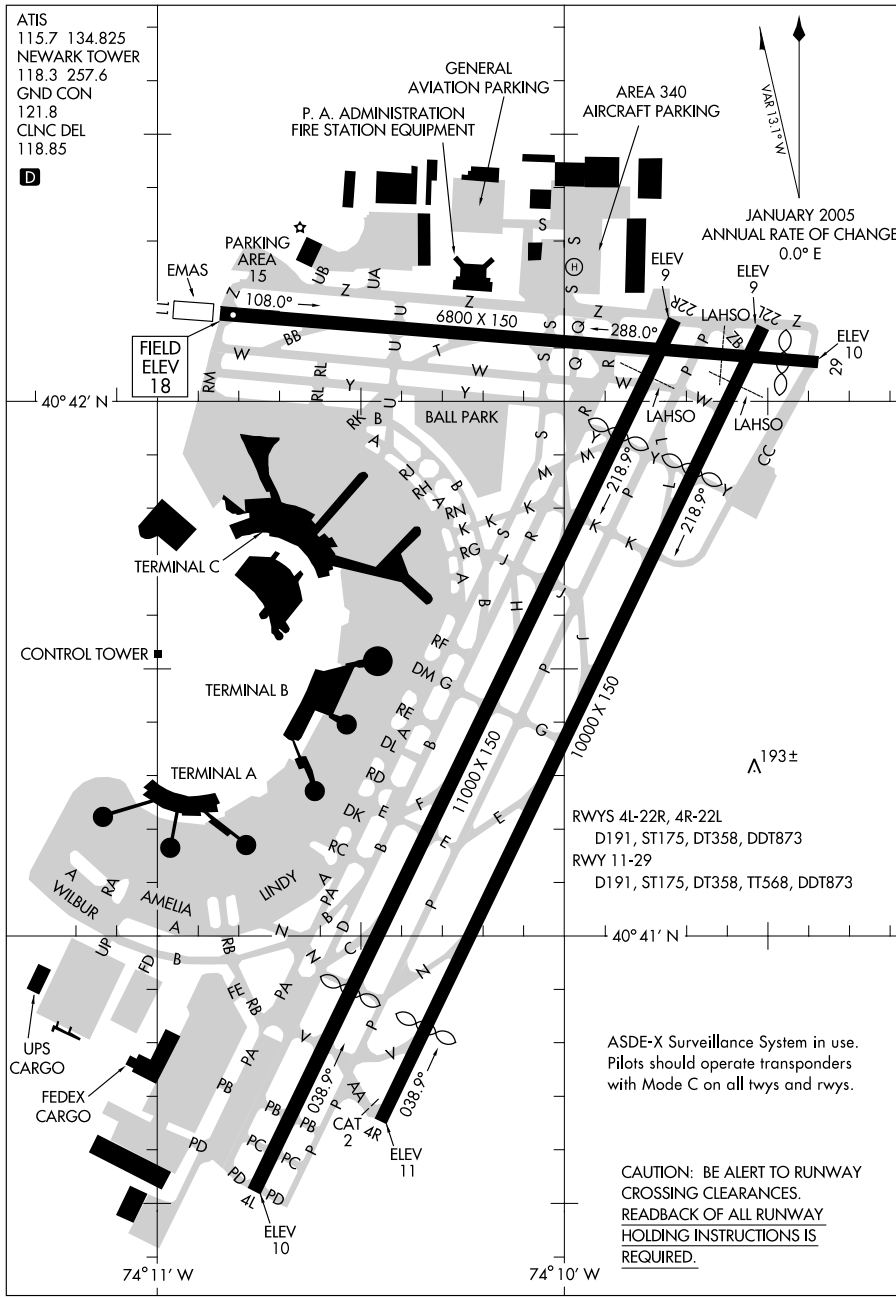
NEW YORK, NEW YORK
NEW YORK/LA GUARDIA (LGA)

10042

AIRPORT DIAGRAM

AL-285 (FAA)

NEWARK LIBERTY INTL (EWR)
NEWARK, NEW JERSEY



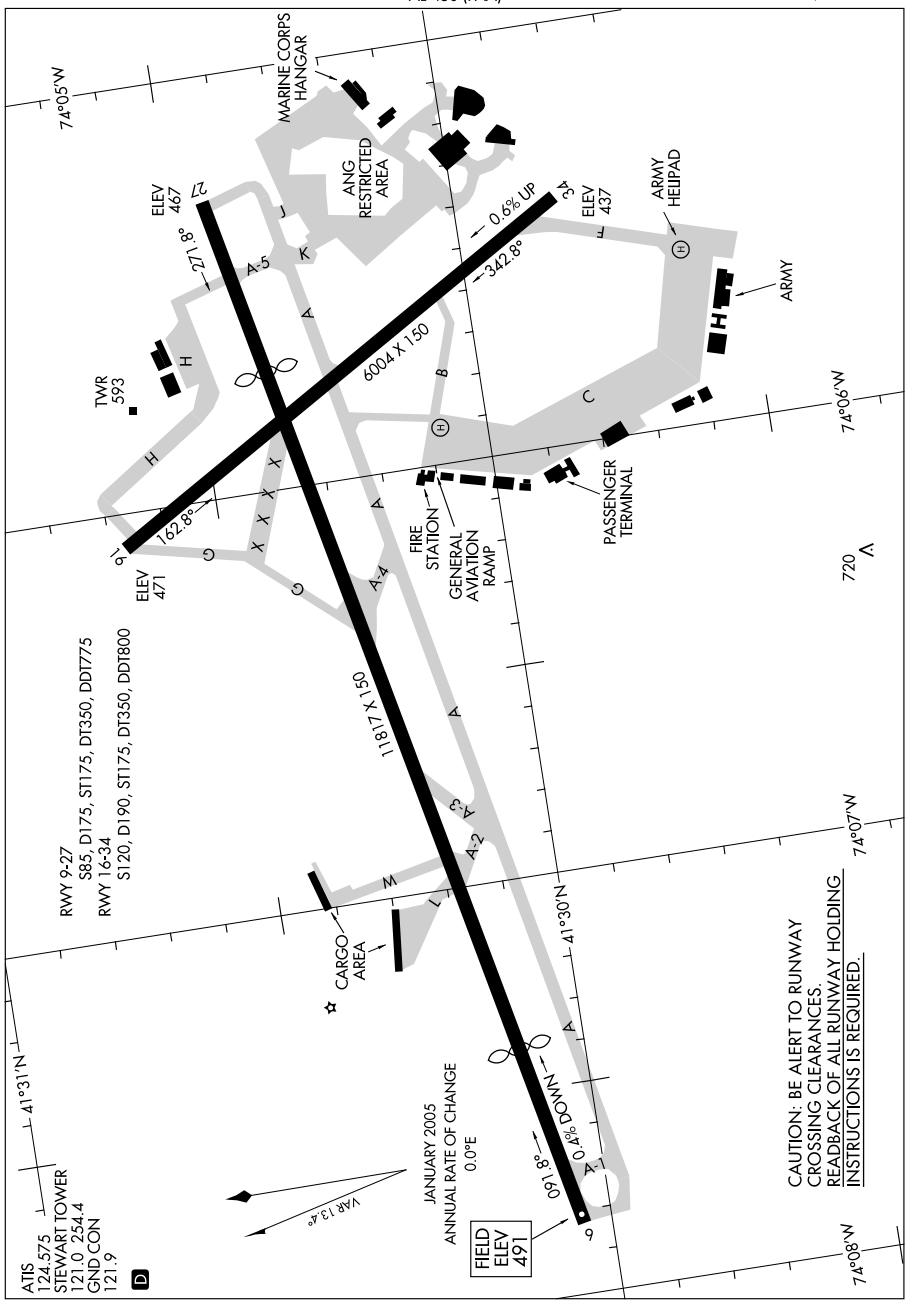
AIRPORT DIAGRAM
10042

NEWARK, NEW JERSEY
NEWARK LIBERTY INTL (EWR)

09015

AIRPORT DIAGRAM

NEWBURGH/ STEWART INTL (SWF)
NEWBURGH, NEW YORK



AIRPORT DIAGRAM

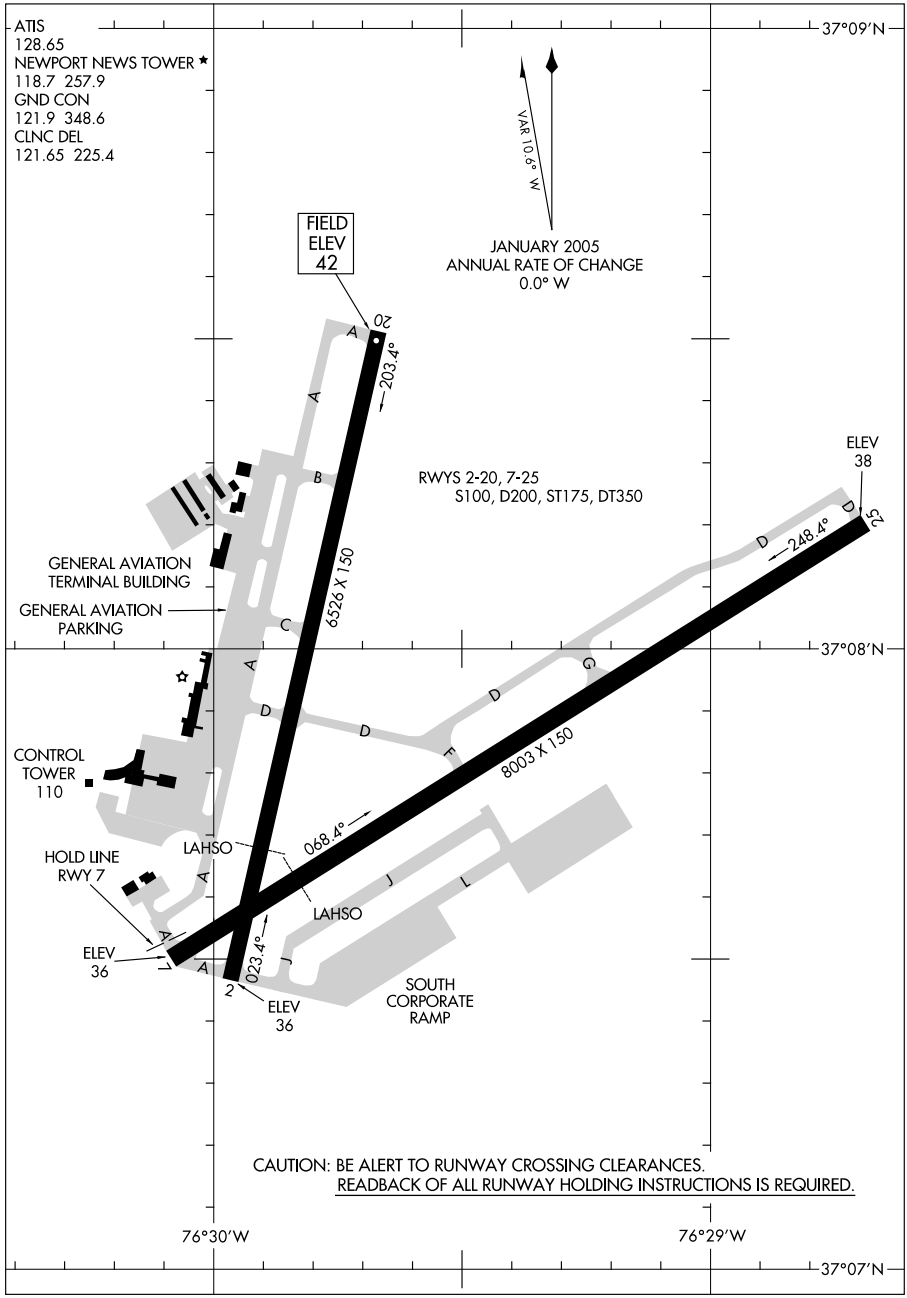
09015

NEWBURGH, NEW YORK
NEWBURGH/ STEWART INTL (SWF)

09127

AIRPORT DIAGRAM

NEWPORT NEWS / WILLIAMSBURG INTL (PHF)
AL-957 (FAA)
NEWPORT NEWS, VIRGINIA



AIRPORT DIAGRAM

09127

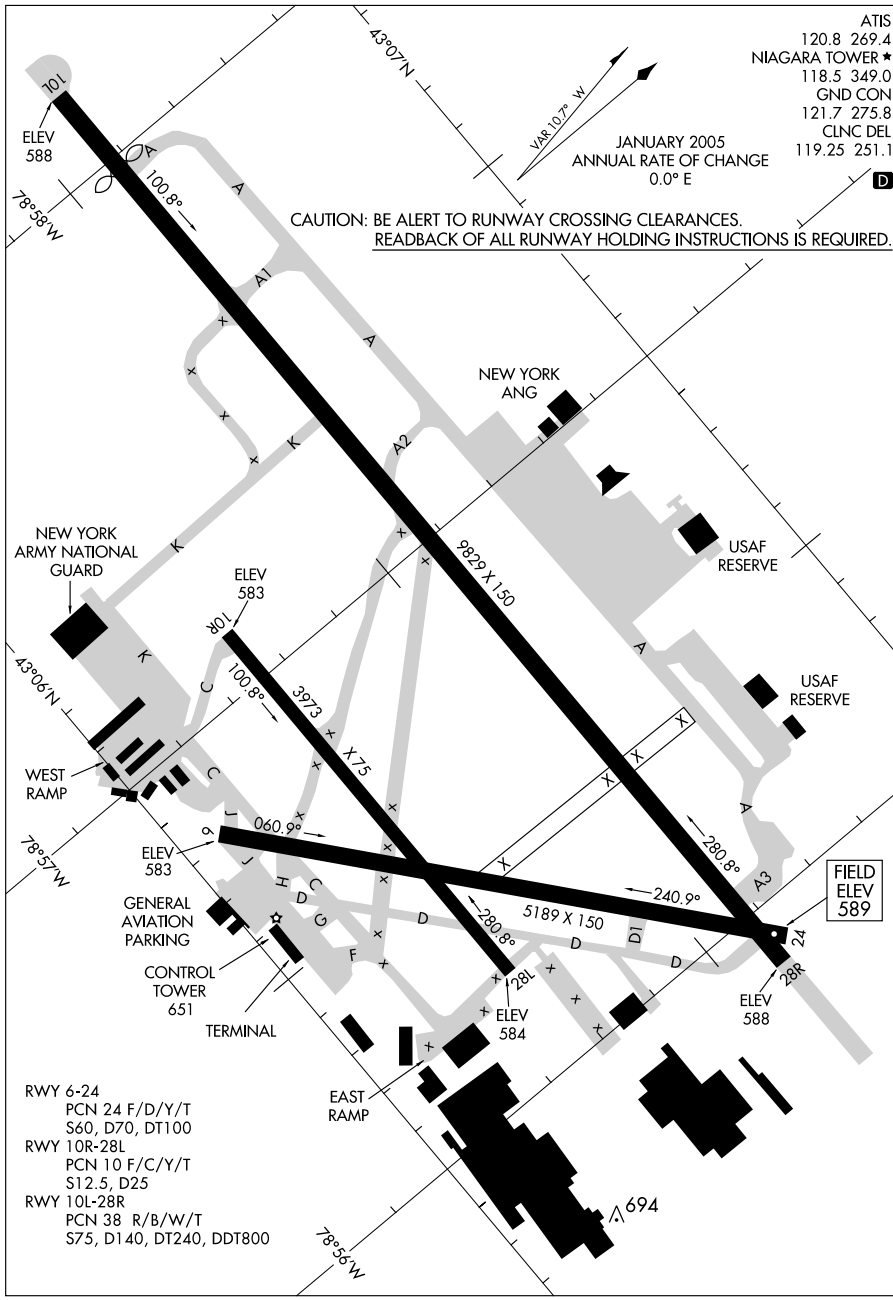
NEWPORT NEWS, VIRGINIA
NEWPORT NEWS / WILLIAMSBURG INTL (PHF)

09015

AIRPORT DIAGRAM

AL-614 (FAA)

NIAGARA FALLS INTL (IAG)
NIAGARA FALLS, NEW YORK



AIRPORT DIAGRAM
09015

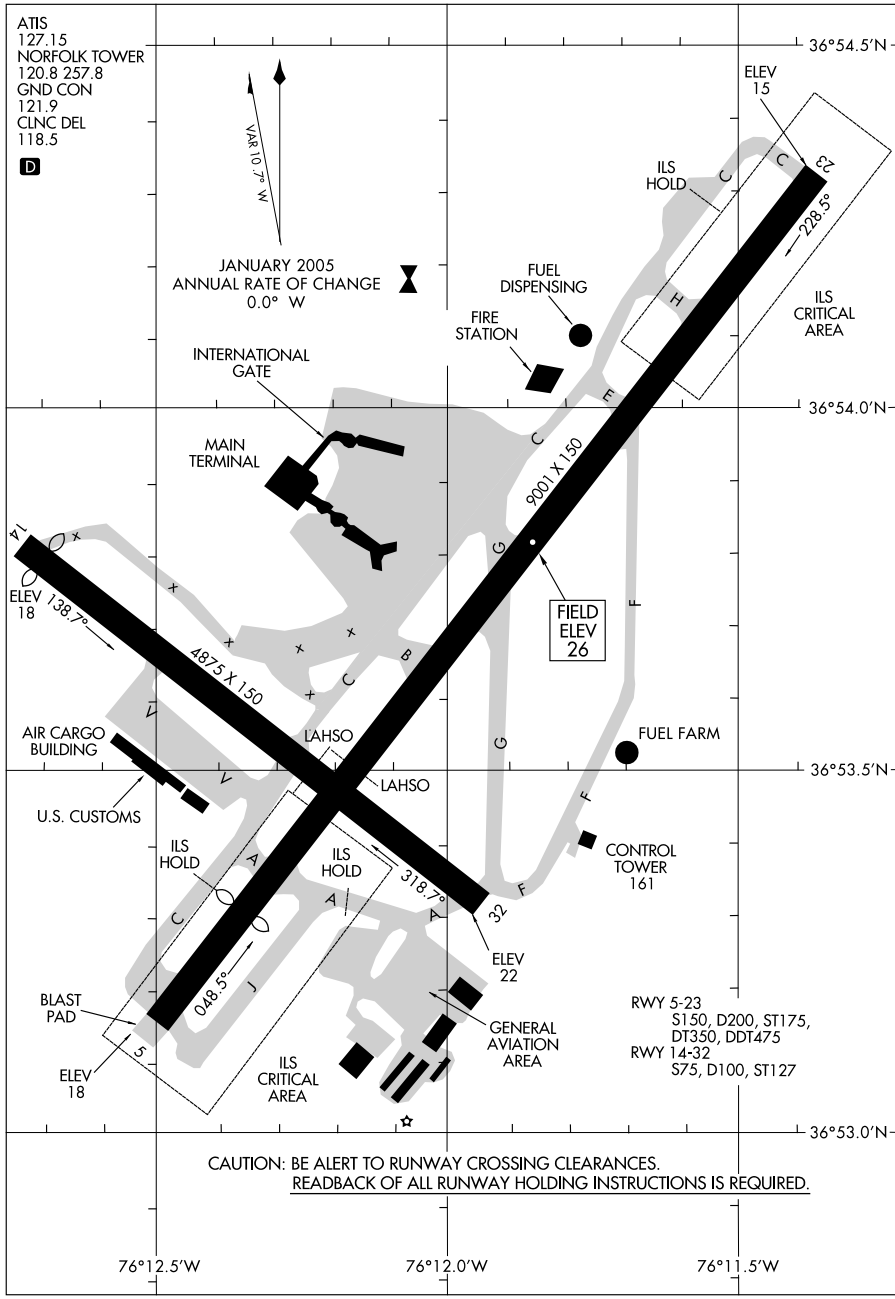
NIAGARA FALLS, NEW YORK
NIAGARA FALLS INTL (IAG)

09015

AIRPORT DIAGRAM

NORFOLK INTL (ORF)
NORFOLK, VIRGINIA

AL-291 (FAA)



AIRPORT DIAGRAM
09015

NORFOLK, VIRGINIA
NORFOLK INTL (ORF)

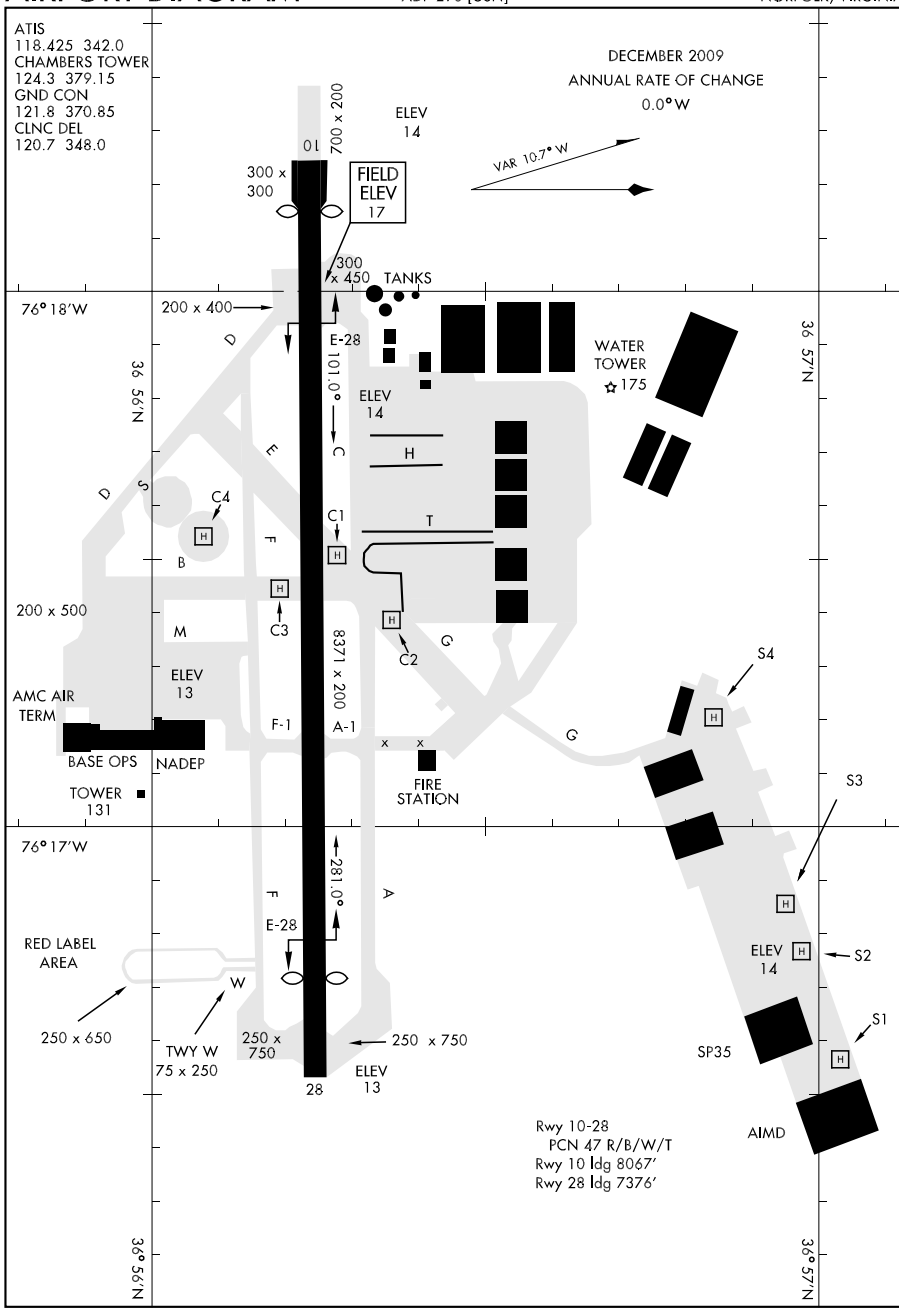
09351

AIRPORT DIAGRAM

NORFOLK NS (CHAMBERS FIELD) (KNGU)

ADF-290 [USN]

NORFOLK, VIRGINIA



AIRPORT DIAGRAM

NORFOLK, VIRGINIA

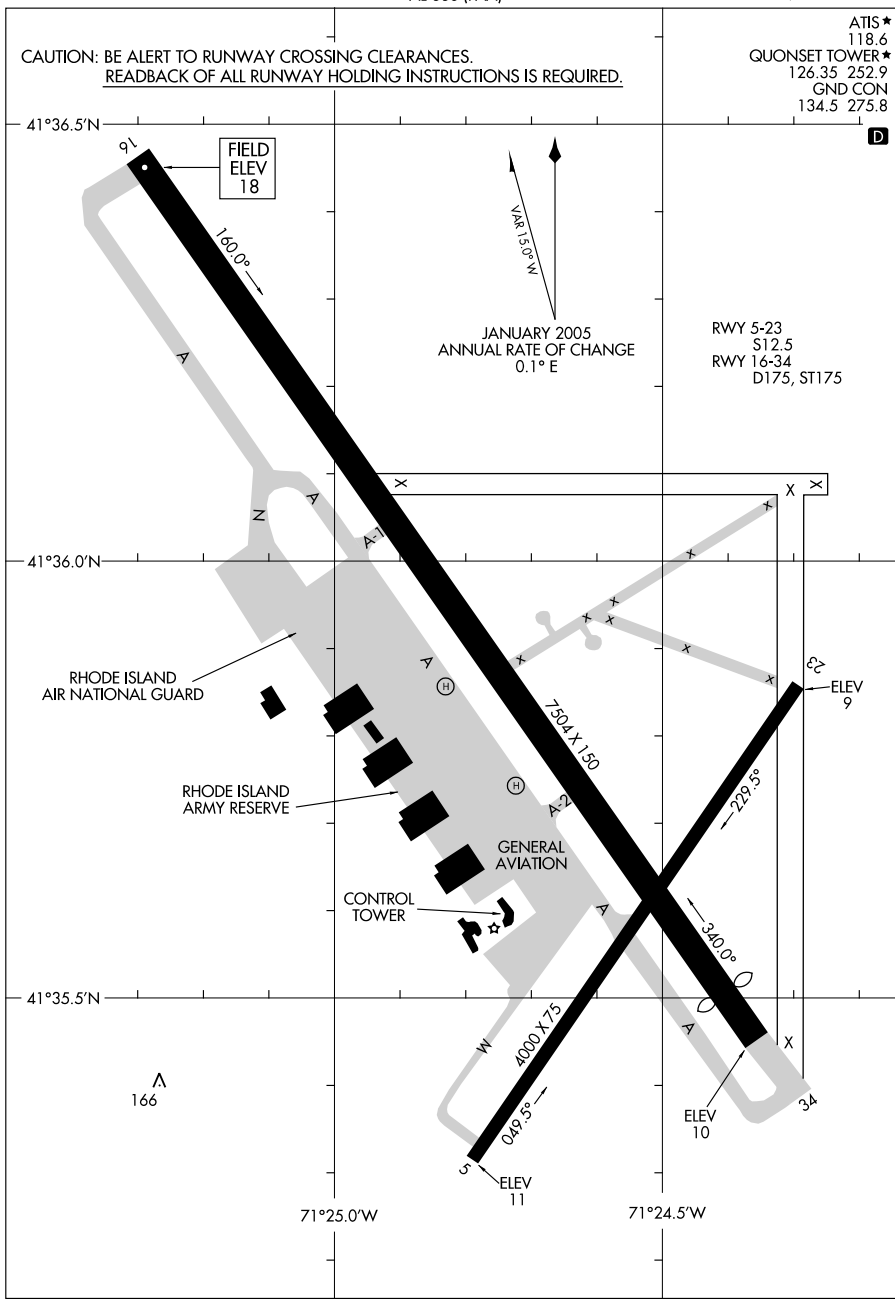
NORFOLK NS (CHAMBERS FIELD) (KNGU)

09015

AIRPORT DIAGRAM

NORTH KINGSTOWN/QUONSET STATE (OQU)
NORTH KINGSTOWN, RHODE ISLAND

AL-338 (FAA)



AIRPORT DIAGRAM
09015

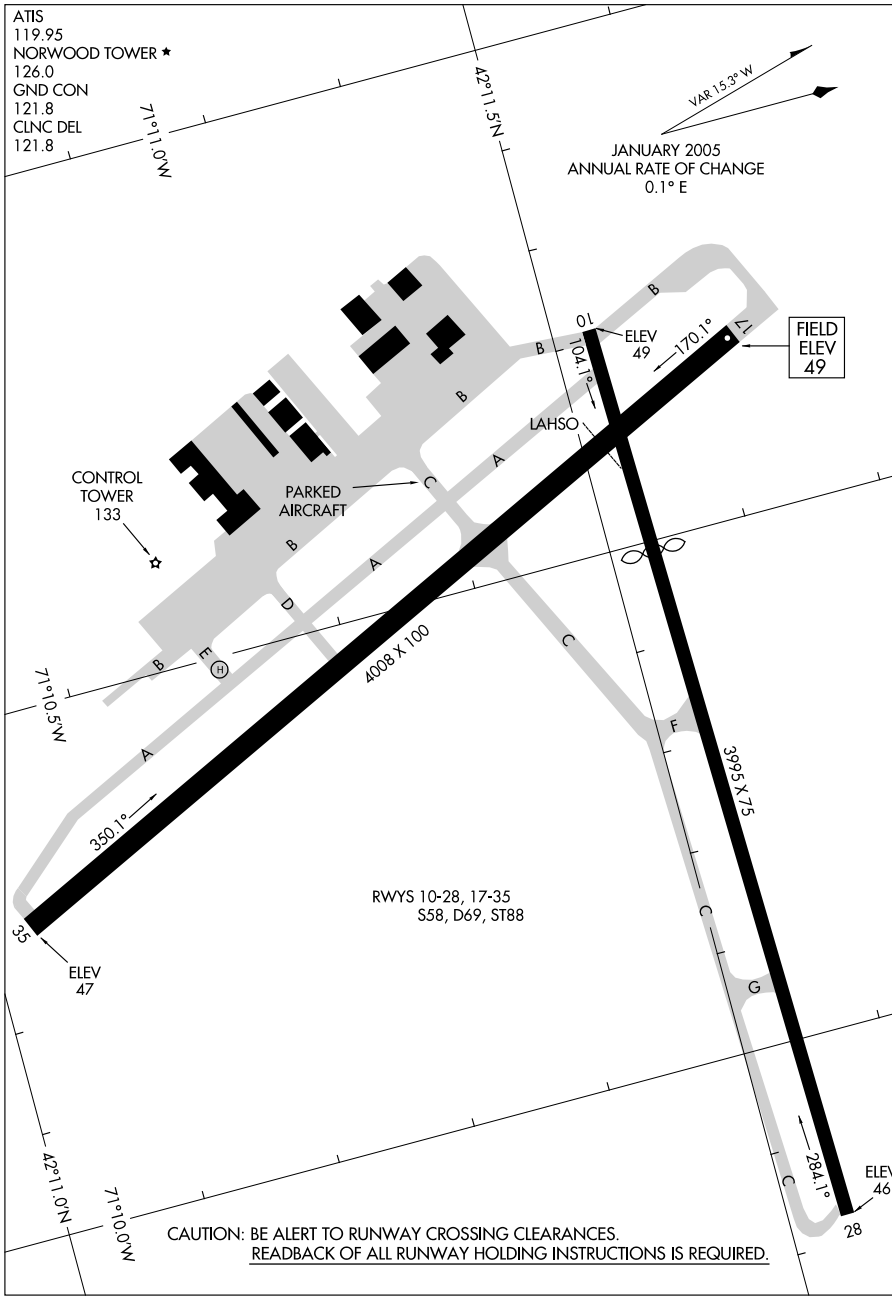
NORTH KINGSTOWN, RHODE ISLAND
NORTH KINGSTOWN/QUONSET STATE (OQU)

09015

AIRPORT DIAGRAM

AL-725 (FAA)

NORWOOD MEMORIAL (OWD)
NORWOOD, MASSACHUSETTS



AIRPORT DIAGRAM

09015

NORWOOD, MASSACHUSETTS
NORWOOD MEMORIAL (OWD)

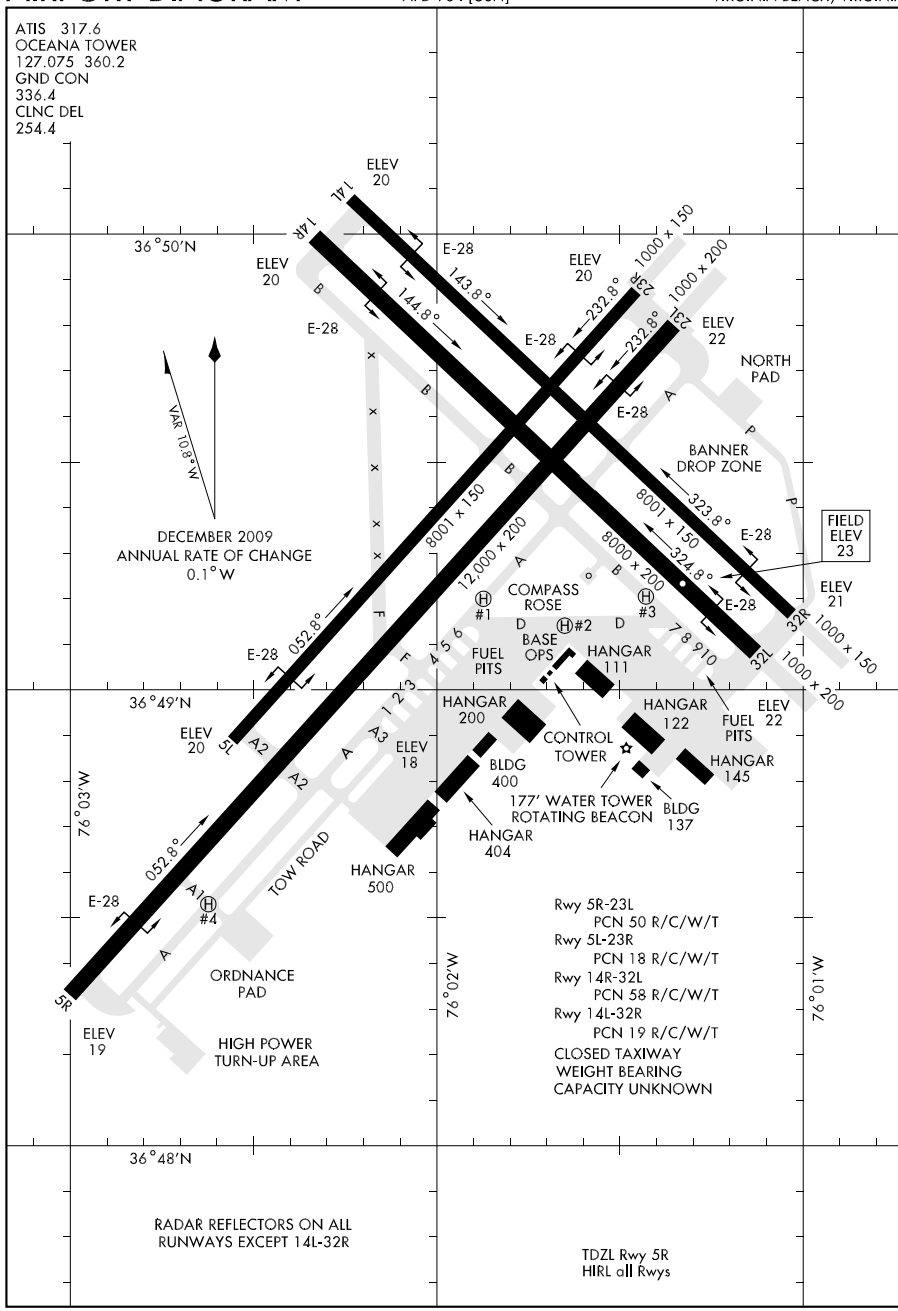
09351

AIRPORT DIAGRAM

OCEANA NAS (APOLLO SOUCEK FIELD) (KNTU)

AFD-934 [USN]

VIRGINIA BEACH, VIRGINIA



AIRPORT DIAGRAM

VIRGINIA BEACH, VIRGINIA

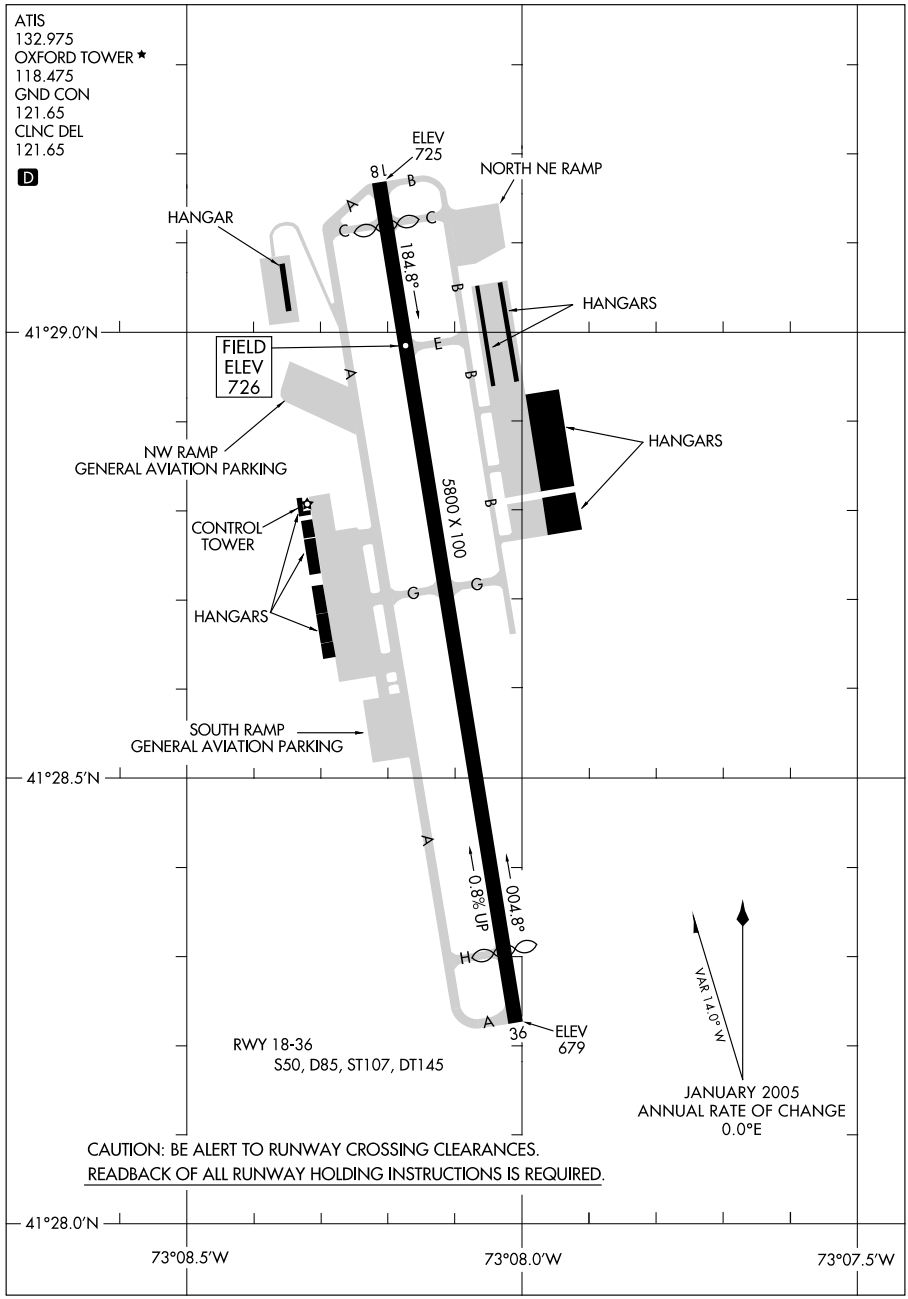
OCEANA NAS (APOLLO SOUCEK FIELD) (KNTU)

09015

AIRPORT DIAGRAM

AL-5785 (FAA)

OXFORD/ WATERBURY-OXFORD (OXC)
OXFORD, CONNECTICUT



AIRPORT DIAGRAM

09015

OXFORD, CONNECTICUT
OXFORD/ WATERBURY-OXFORD (OXC)

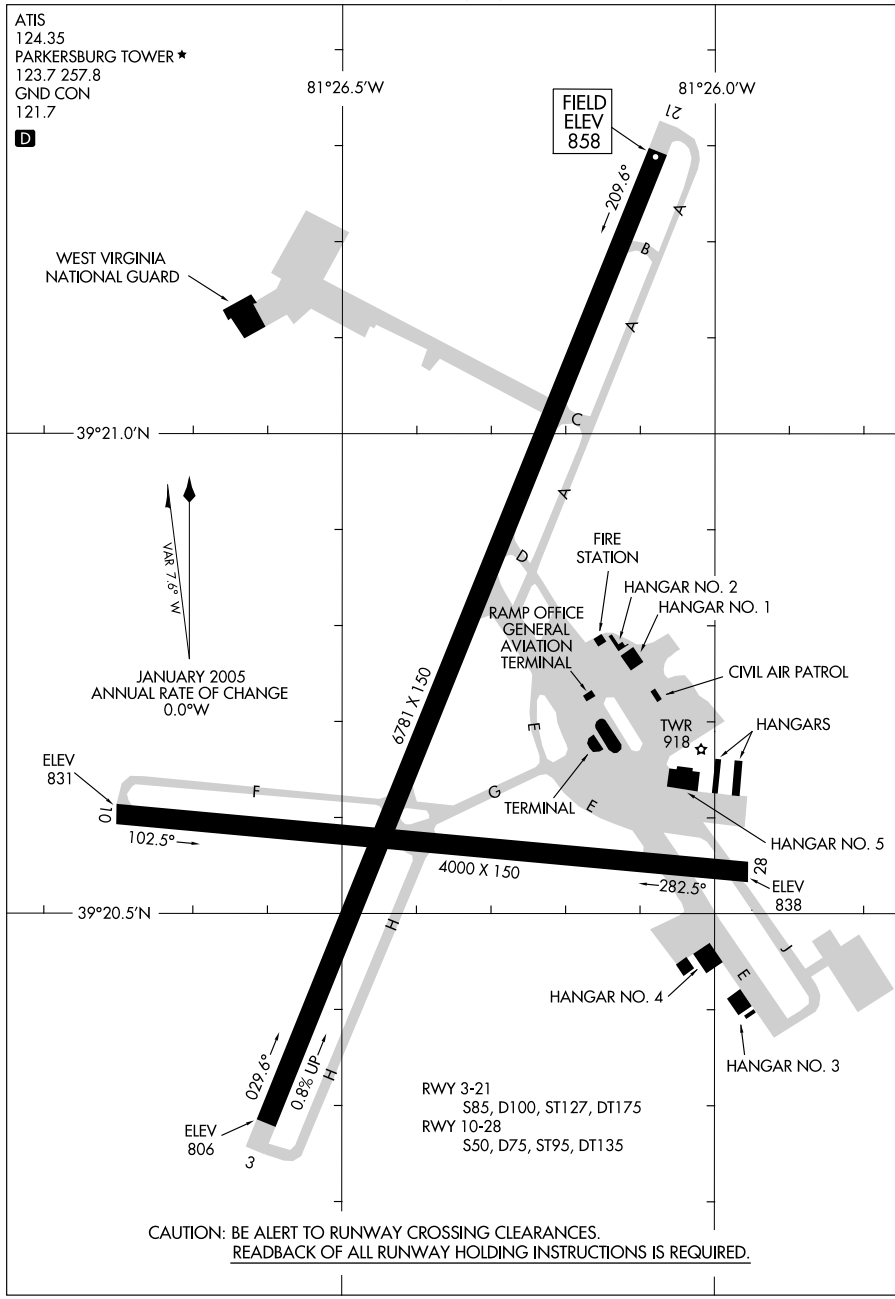
09351

AIRPORT DIAGRAM

PARKERSBURG/MID-OHIO VALLEY RGNL (PKB)

AL-646 (FAA)

PARKERSBURG, WEST VIRGINIA



AIRPORT DIAGRAM

09351

PARKERSBURG, WEST VIRGINIA

PARKERSBURG/MID-OHIO VALLEY RGNL (PKB)

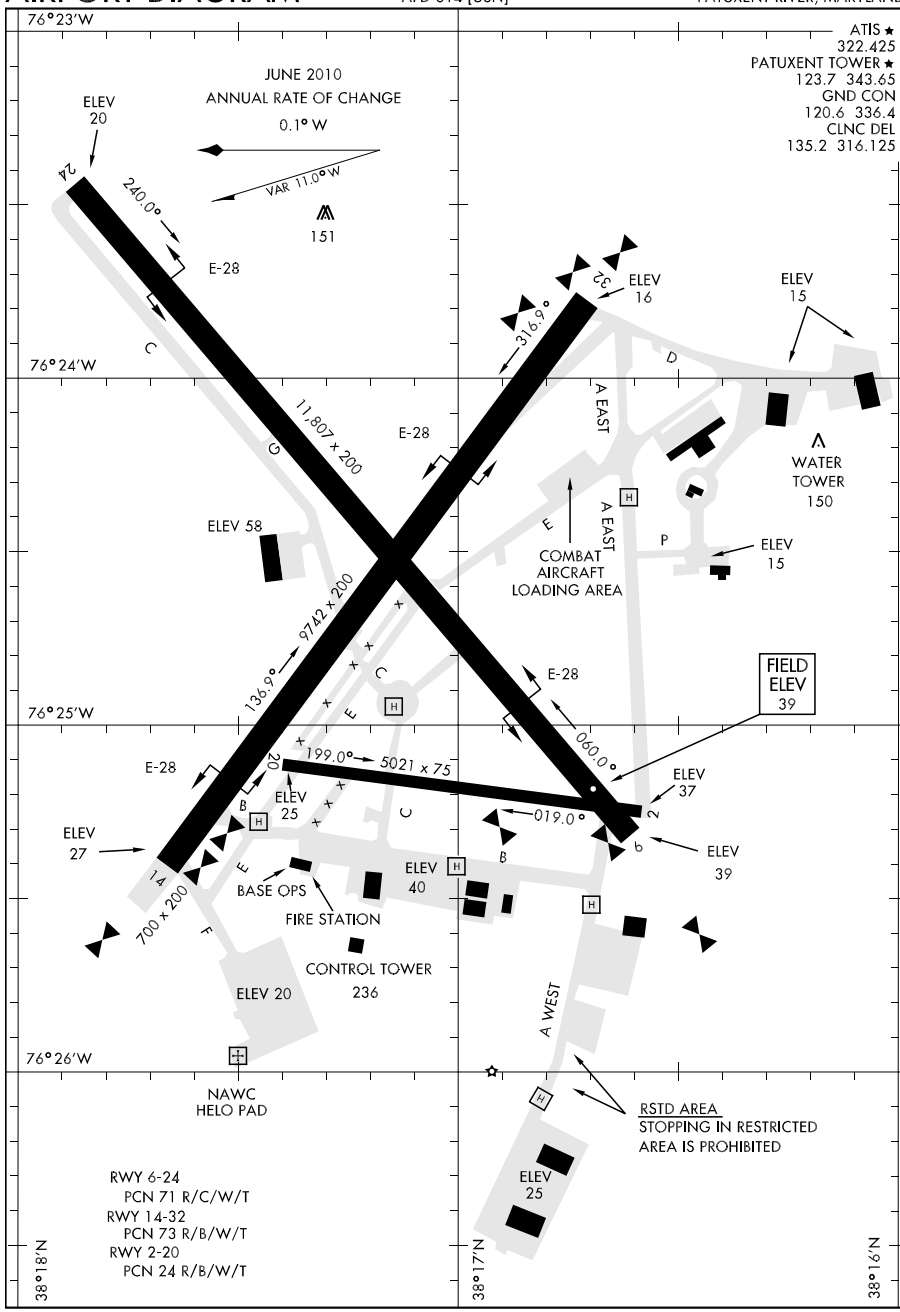
10126

AIRPORT DIAGRAM

PATUXENT RIVER NAS (TRAPNELL FIELD) (KNHK)

AFD-314 [USN]

PATUXENT RIVER, MARYLAND



AIRPORT DIAGRAM

PATUXENT RIVER, MARYLAND

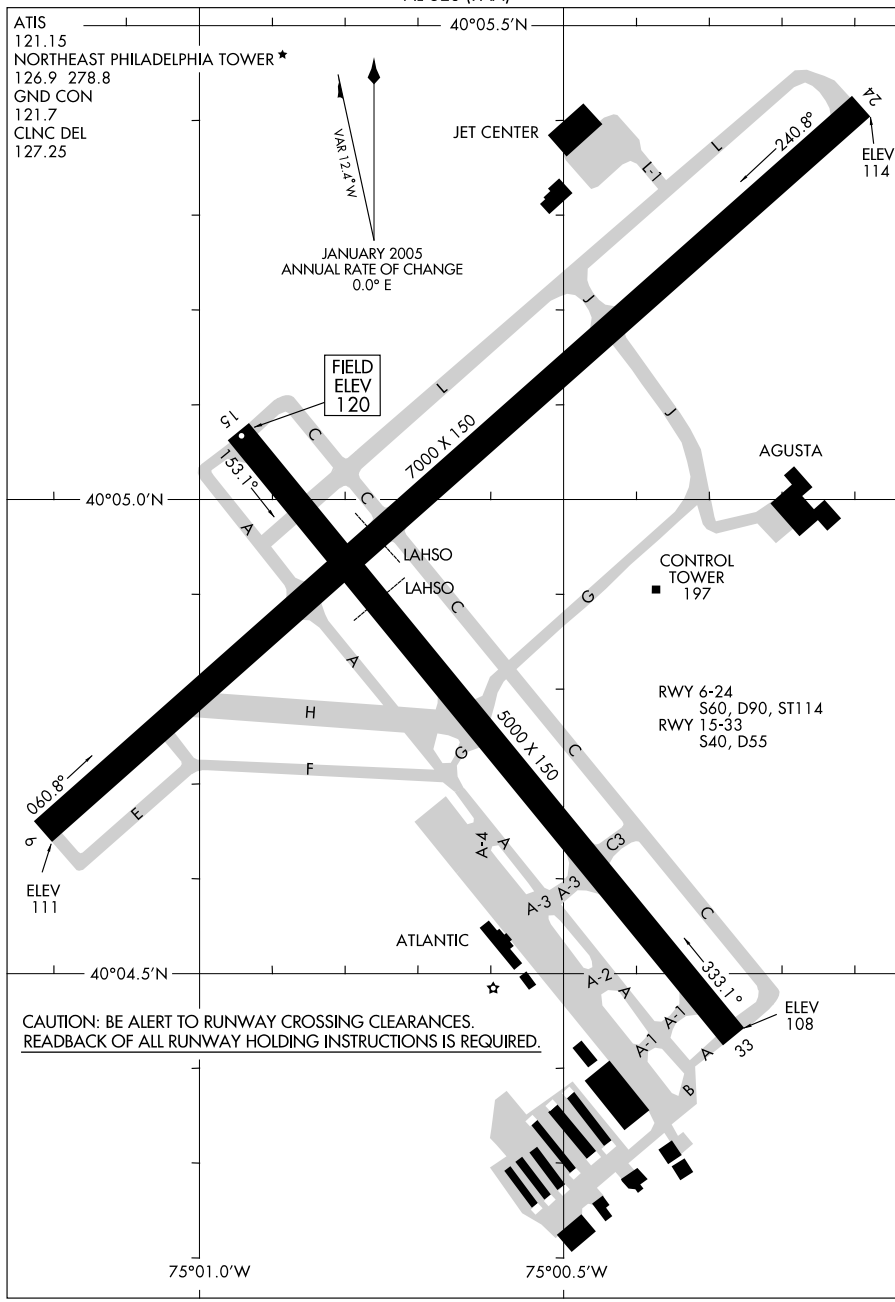
PATUXENT RIVER NAS (TRAPNELL FIELD) (KNHK)

09295

AIRPORT DIAGRAM

PHILADELPHIA / NORTHEAST PHILADELPHIA (PNE)
PHILADELPHIA, PENNSYLVANIA

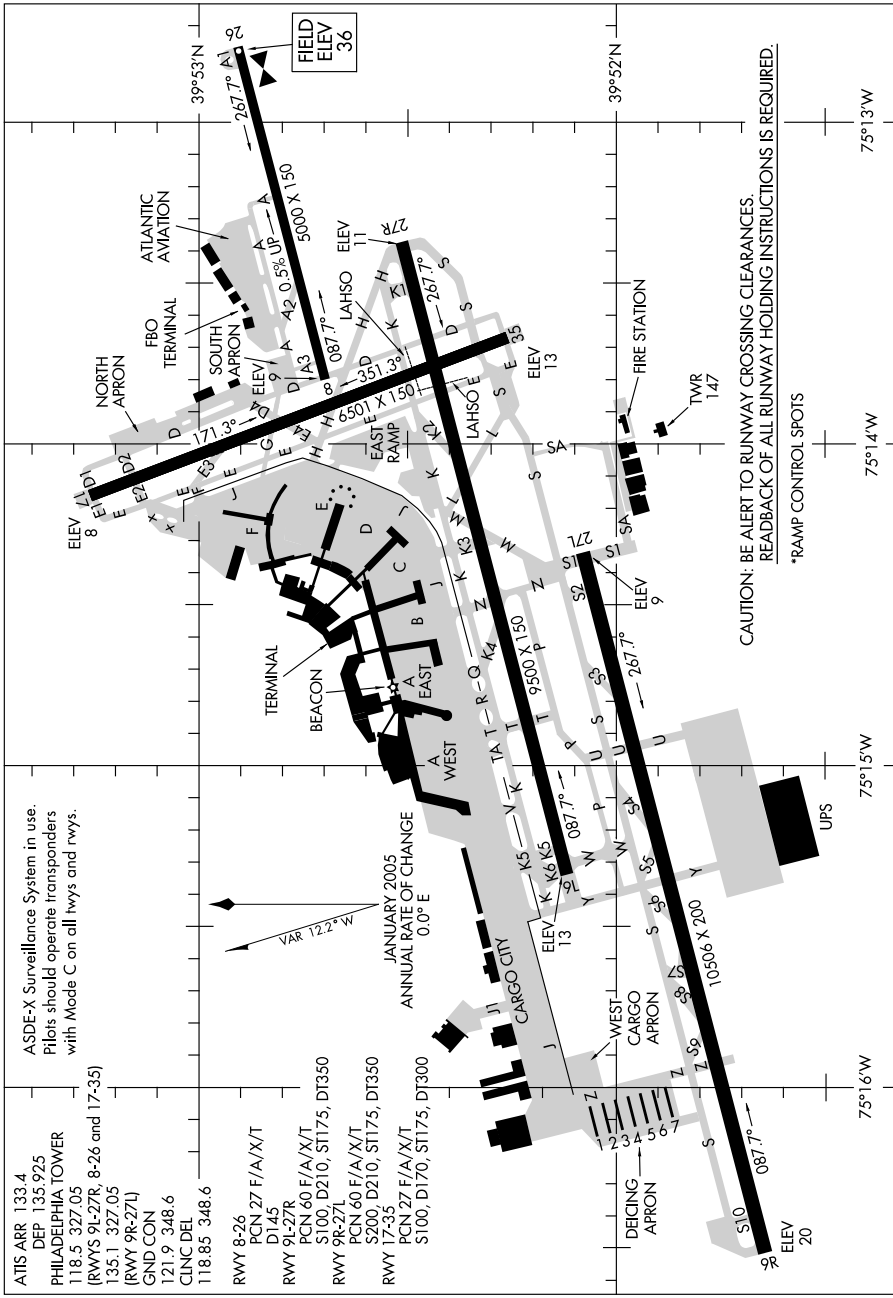
AL-528 (FAA)



AIRPORT DIAGRAM

PHILADELPHIA, PENNSYLVANIA
PHILADELPHIA / NORTHEAST PHILADELPHIA (PNE)

09295

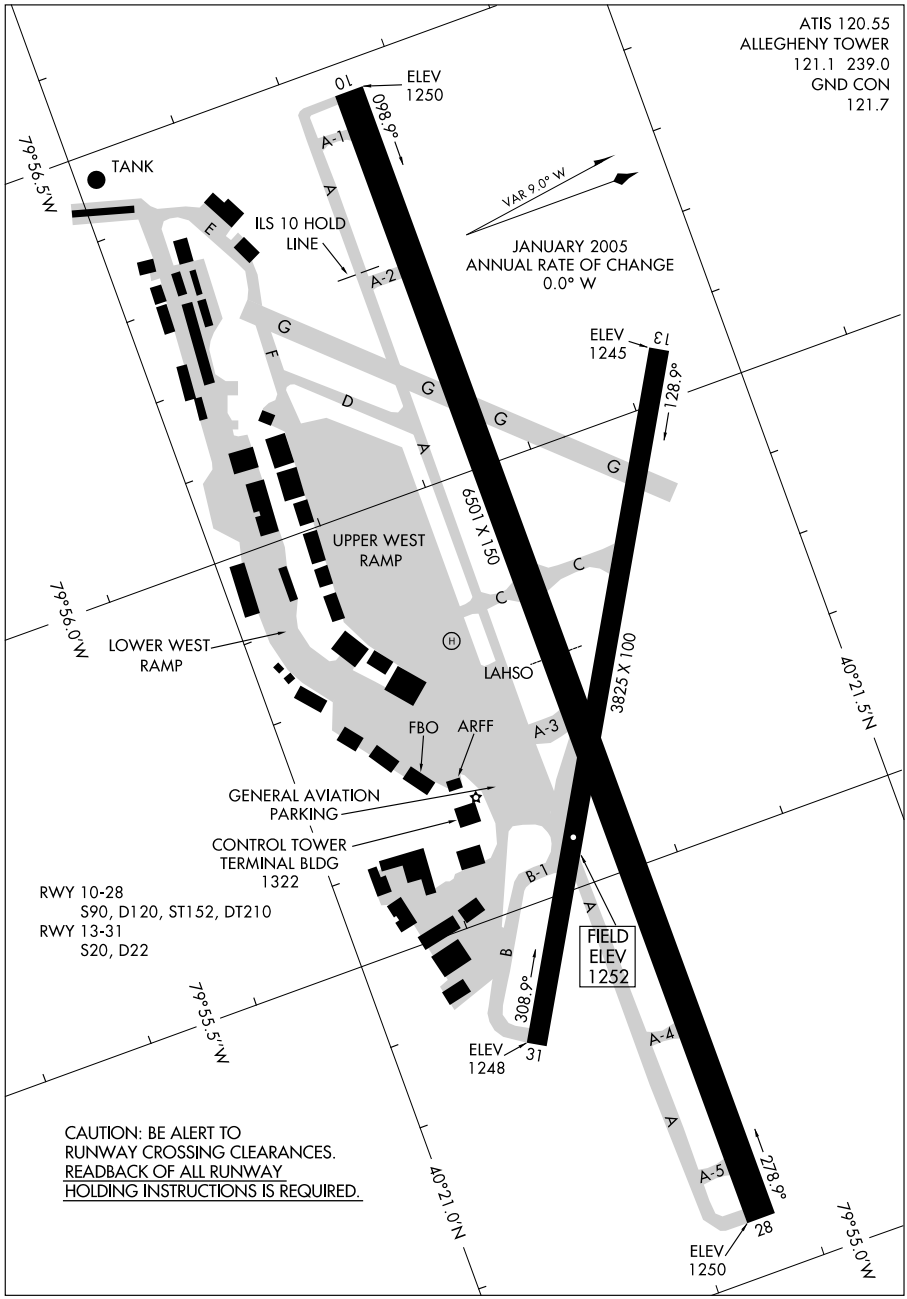

10154
AIRPORT DIAGRAM
AL-320 (FAA)
PHILADELPHIA INTL (PHL)
PHILADELPHIA, PENNSYLVANIA
FIELD ELEV 36
39°53'N
39°52'N
75°13'W
75°14'W
75°15'W
75°16'W
ATLANTIC AVIATION
FBO TERMINAL
SOUTH APRON
NORTH APRON
EAST RAMP
TERMINAL
BEACON
A EAST
A WEST
LAHSO
ELEV 11
ELEV 13
ELEV 9
ELEV 8
ELEV 20
FIRE STATION
TWR 147
UPS
CARGO CITY
WEST CARGO APRON
DEICING APRON
5000 X 150
6501 X 150
9500 X 150
10506 X 200
267.7°
087.7°
351.3°
171.3°
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
*RAMP CONTROL SPOTS
ASDE-X Surveillance System in use.
Pilots should operate transponders with Mode C on all twys and rwys.
ATIS ARR 133.4
DEP 135.925
PHILADELPHIA TOWER
118.5 327.05
(RWYS 9L-27R, 8-26 and 17-35)
135.1 327.05
(RWY 9R-27L)
GND CON
121.9 348.6
CLNC DEL
118.85 348.6
RWY 8-26
PCN 27 F/A/X/T
D145
RWY 9L-27R
PCN 60 F/A/X/T
S100, D210, ST175, DT350
RWY 9R-27L
PCN 60 F/A/X/T
S200, D210, ST175, DT350
RWY 17-35
PCN 27 F/A/X/T
S100, D170, ST175, DT300
VAR 12.2°W
JANUARY 2005
ANNUAL RATE OF CHANGE
0.0° E
AIRPORT DIAGRAM
10154
PHILADELPHIA, PENNSYLVANIA
PHILADELPHIA INTL (PHL)

07242

AIRPORT DIAGRAM

AL-326 (FAA)

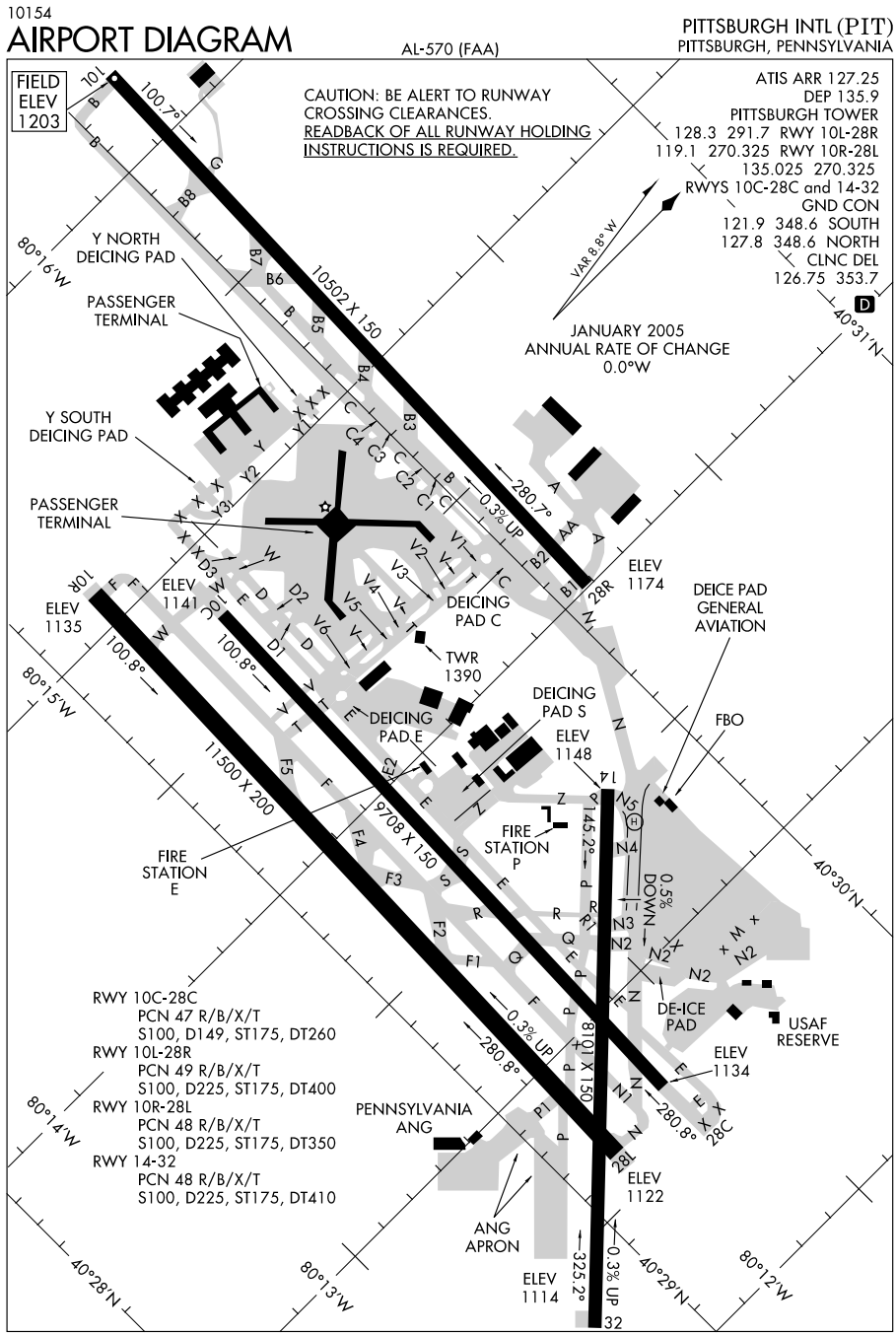
PITTSBURGH / ALLEGHENY COUNTY (AGC)
PITTSBURGH, PENNSYLVANIA



AIRPORT DIAGRAM

07242

PITTSBURGH, PENNSYLVANIA
PITTSBURGH / ALLEGHENY COUNTY (AGC)

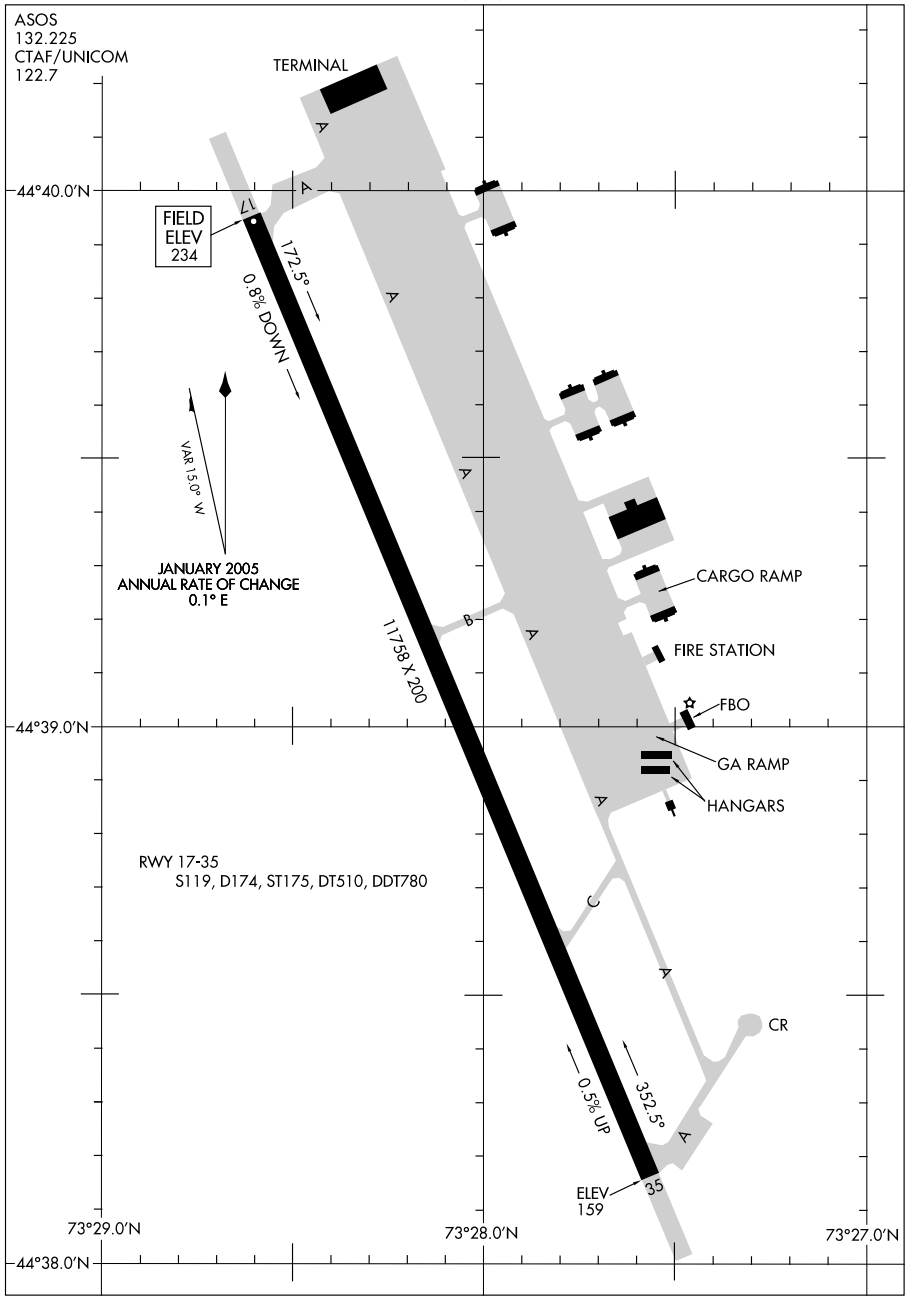

10154
AIRPORT DIAGRAM
AL-570 (FAA)
PITTSBURGH INTL (PIT)
PITTSBURGH, PENNSYLVANIA
FIELD ELEV 1203
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
ATIS ARR 127.25
DEP 135.9
PITTSBURGH TOWER
128.3 291.7 RWY 10L-28R
119.1 270.325 RWY 10R-28L
135.025 270.325
RWYS 10C-28C and 14-32
GND CON
121.9 348.6 SOUTH
127.8 348.6 NORTH
CLNC DEL
126.75 353.7
VAR 8.8° W
JANUARY 2005
ANNUAL RATE OF CHANGE
0.0°W
80°16'W
40°31'N
Y NORTH DEICING PAD
PASSENGER TERMINAL
Y SOUTH DEICING PAD
PASSENGER TERMINAL
10502 X 150
280.7°
0.3% UP
ELEV 1174
28R
DEICING PAD C
ELEV 1141
ELEV 1135
TWR 1390
DEICE PAD GENERAL AVIATION
DEICING PAD S
ELEV 1148
DEICING PAD E
FBO
100.8°
80°15'W
11500 X 200
9708 X 150
FIRE STATION P
FIRE STATION E
145.2°
0.5% DOWN
40°30'N
DE-ICE PAD
USAF RESERVE
RWY 10C-28C
PCN 47 R/B/X/T
S100, D149, ST175, DT260
RWY 10L-28R
PCN 49 R/B/X/T
S100, D225, ST175, DT400
RWY 10R-28L
PCN 48 R/B/X/T
S100, D225, ST175, DT350
RWY 14-32
PCN 48 R/B/X/T
S100, D225, ST175, DT410
0.3% UP
280.8°
810 X 150
ELEV 1134
80°14'W
PENNSYLVANIA ANG
ANG APRON
ELEV 1122
ELEV 1114
325.2°
0.3% UP
32
40°28'N
80°13'W
40°29'N
80°12'W
AIRPORT DIAGRAM
10154
PITTSBURGH, PENNSYLVANIA
PITTSBURGH INTL (PIT)

09071

AIRPORT DIAGRAM

AL-729 (FAA)

PLATTSBURGH INTL (PBG)
PLATTSBURGH, NEW YORK



AIRPORT DIAGRAM

09071

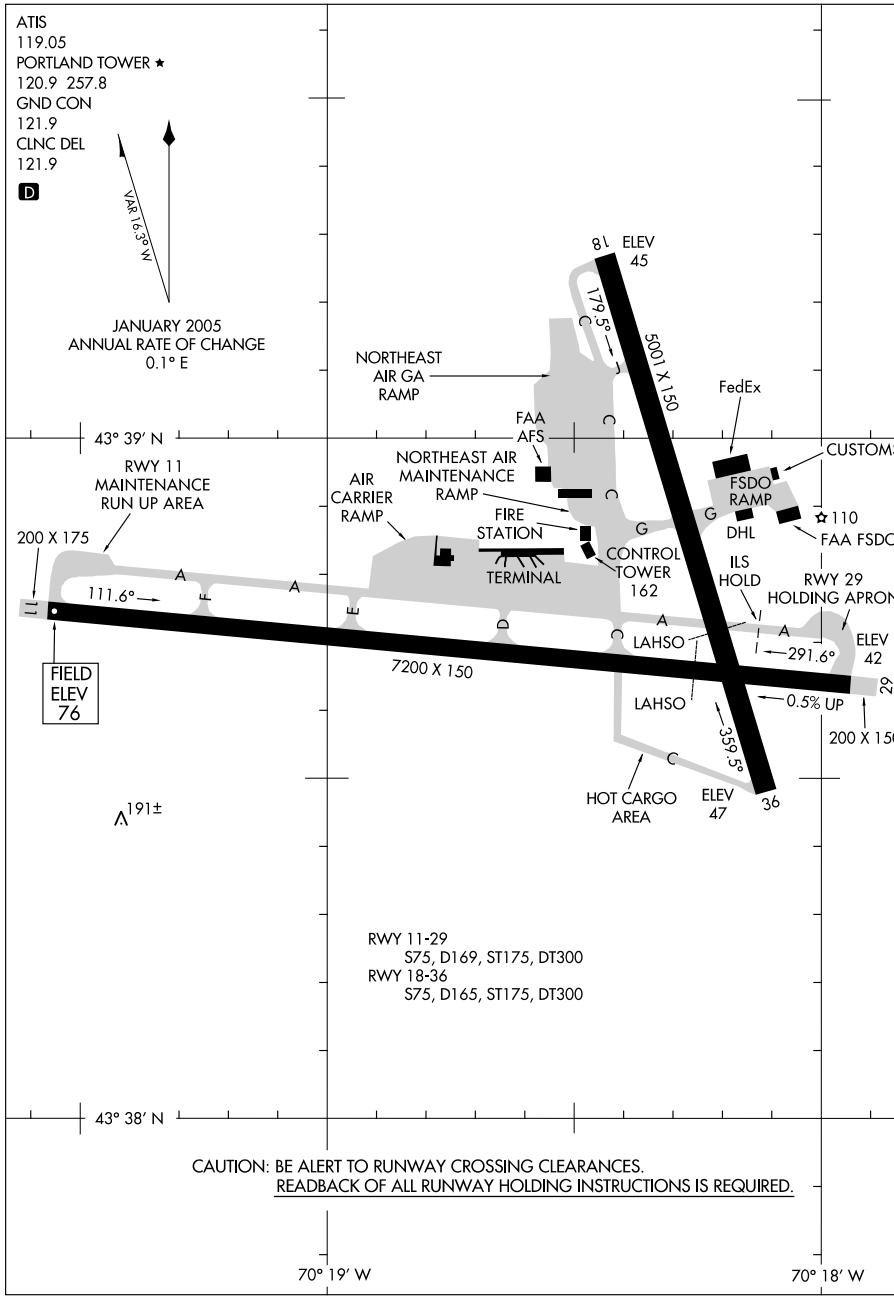
PLATTSBURGH, NEW YORK
PLATTSBURGH INTL (PBG)

09015

AIRPORT DIAGRAM

AL-329 (FAA)

PORTLAND INTL JETPORT (PWM)
PORTLAND, MAINE



AIRPORT DIAGRAM

09015

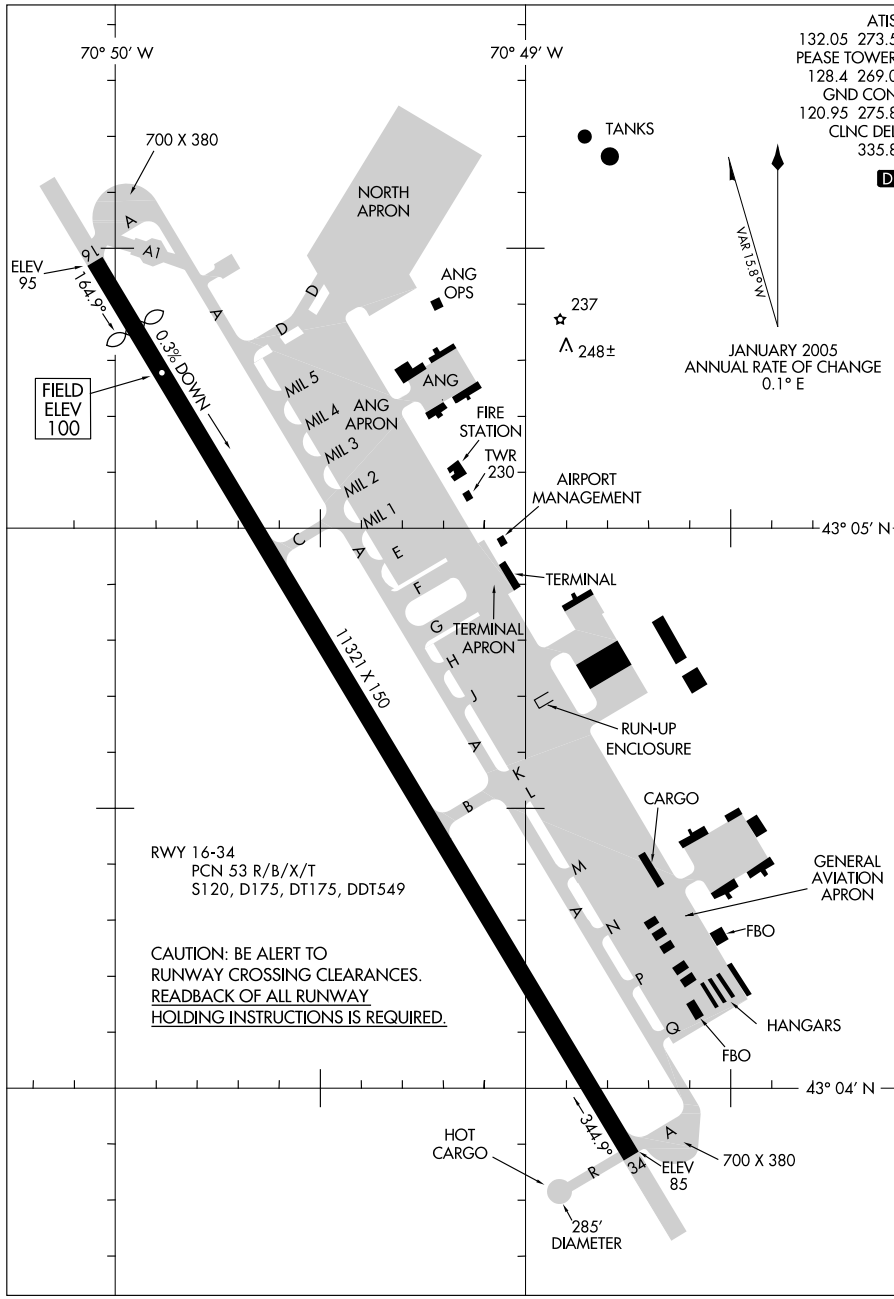
PORTLAND, MAINE
PORTLAND INTL JETPORT (PWM)

10154

AIRPORT DIAGRAM

AL-678 (FAA)

PORTSMOUTH INTL AT PEASE (PSM)
PORTSMOUTH, NEW HAMPSHIRE



AIRPORT DIAGRAM
10154

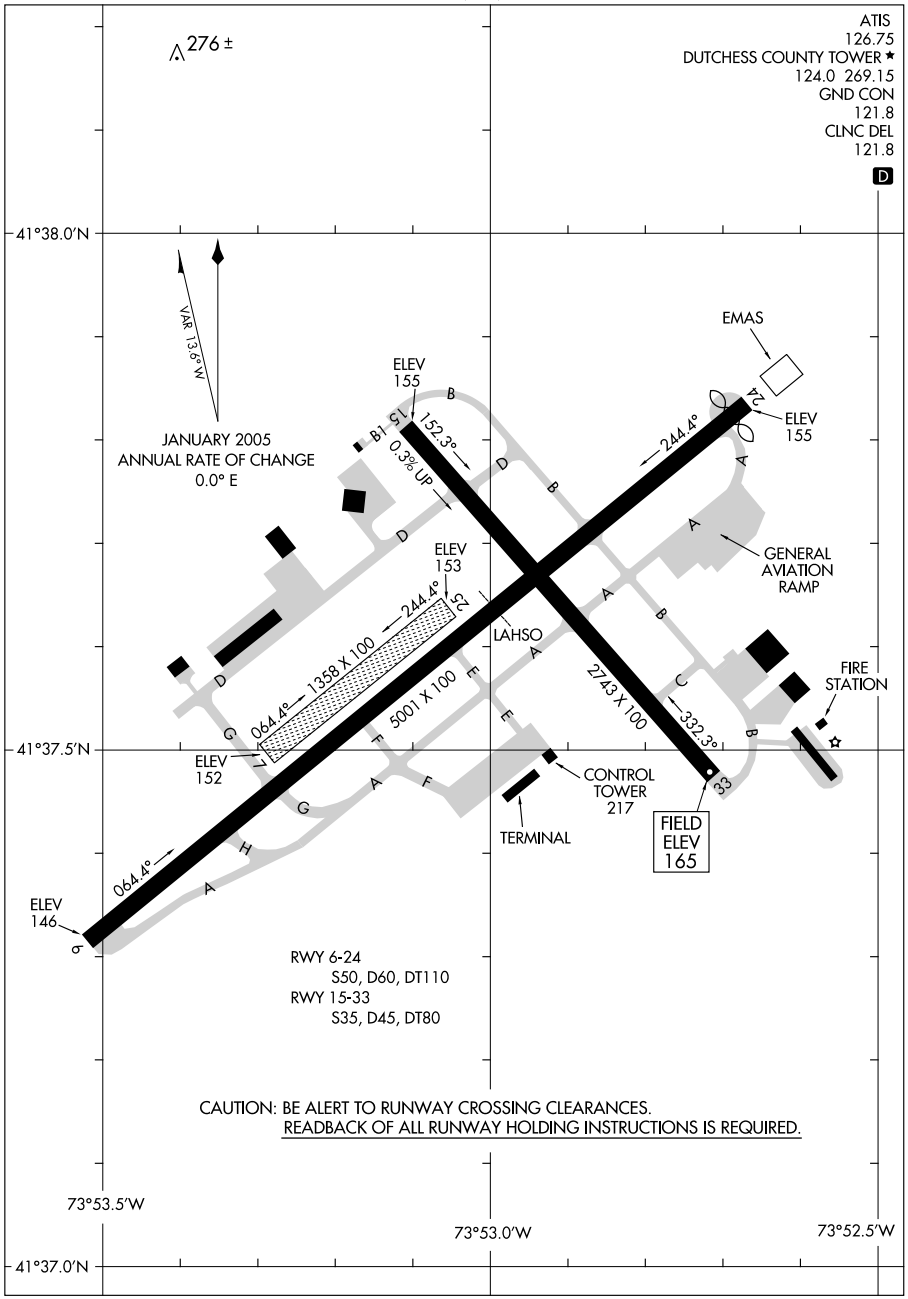
PORTSMOUTH, NEW HAMPSHIRE
PORTSMOUTH INTL AT PEASE (PSM)

10042

AIRPORT DIAGRAM

AL-286 (FAA)

POUGHKEEPSIE/DUTCHESS COUNTY (POU)
POUGHKEEPSIE, NEW YORK



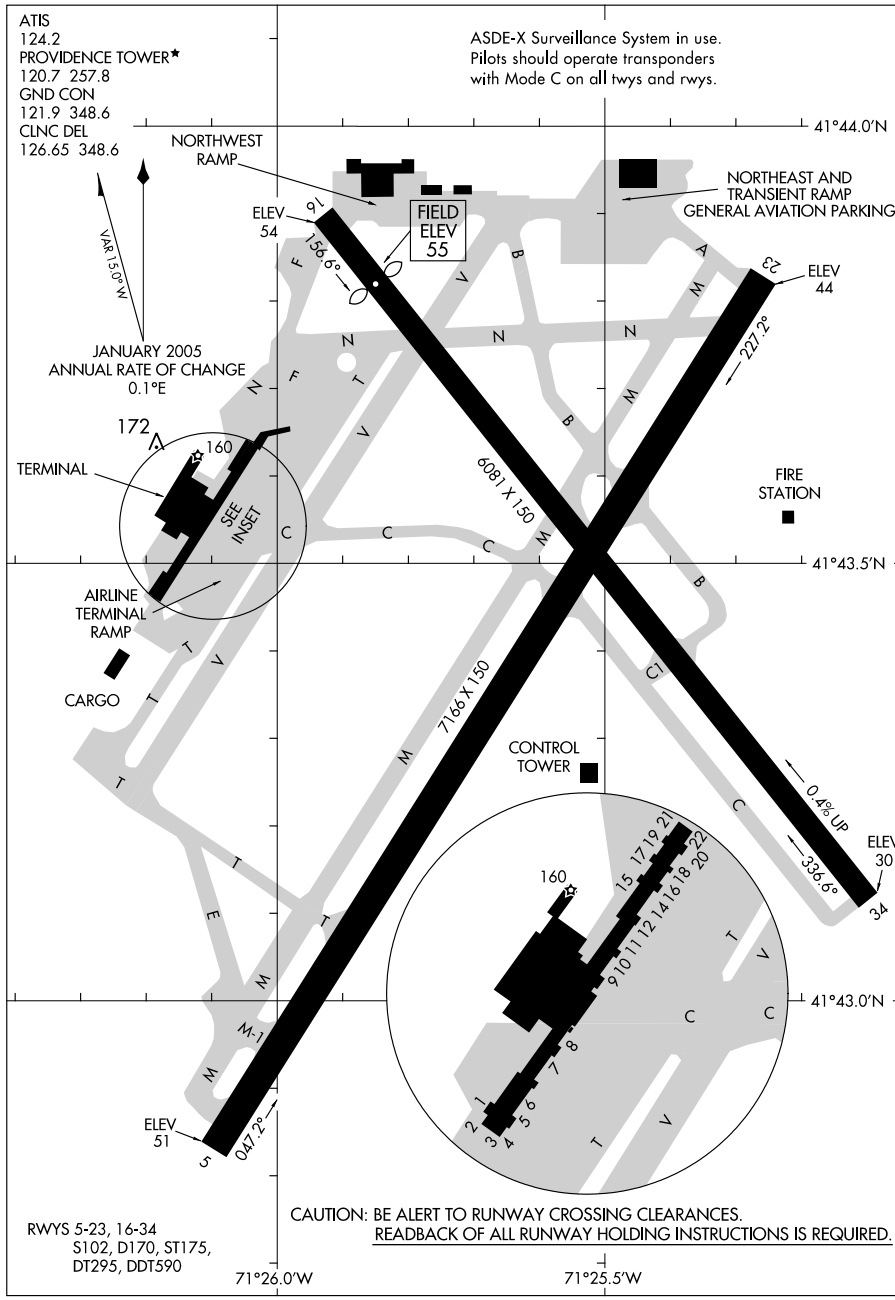
AIRPORT DIAGRAM
10042

POUGHKEEPSIE, NEW YORK
POUGHKEEPSIE/DUTCHESS COUNTY (POU)

09351

AIRPORT DIAGRAM

PROVIDENCE / THEODORE FRANCIS GREEN STATE (PVD)
AL-333 (FAA)
PROVIDENCE, RHODE ISLAND



AIRPORT DIAGRAM

PROVIDENCE, RHODE ISLAND
PROVIDENCE / THEODORE FRANCIS GREEN STATE (PVD)

09351

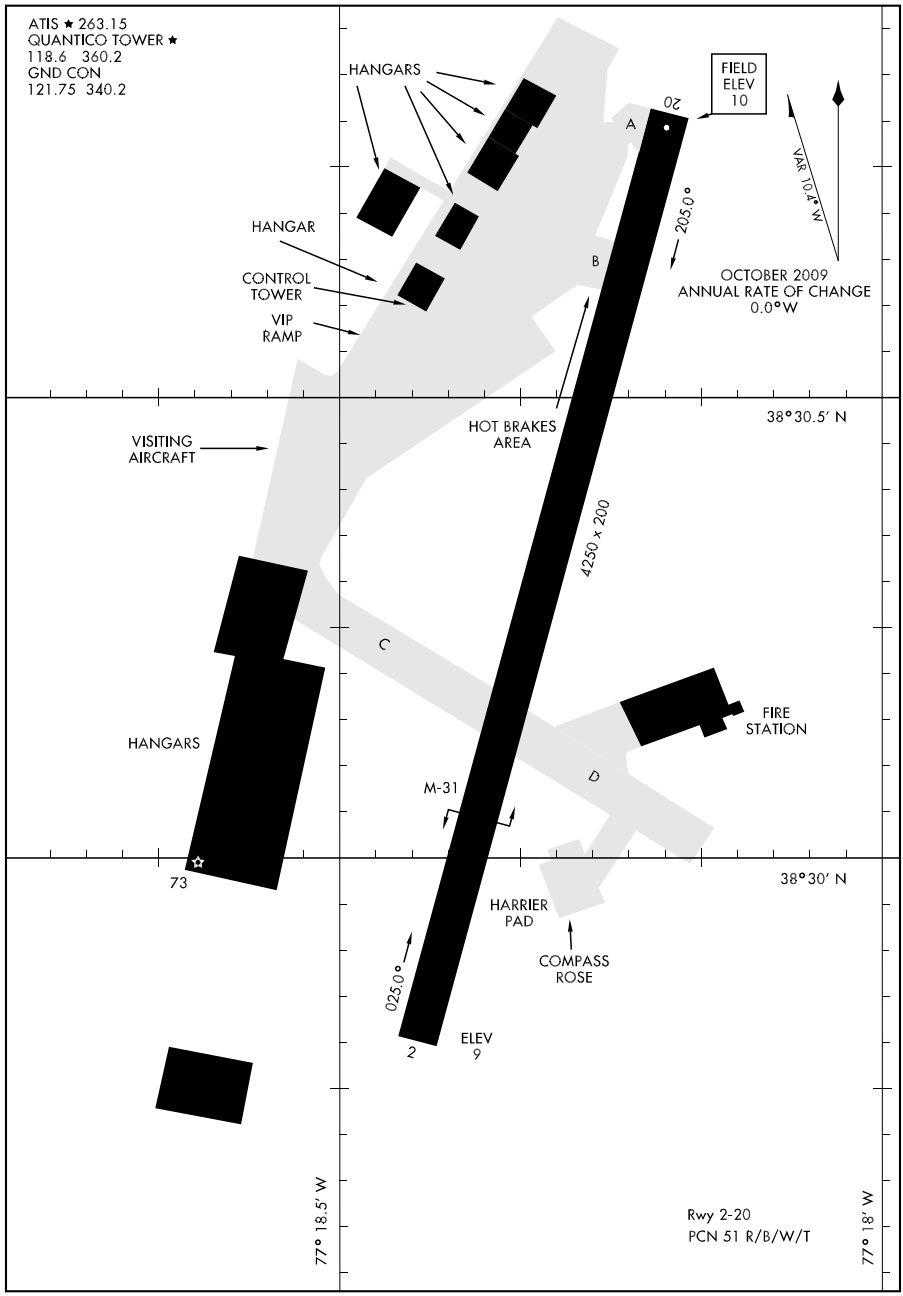
09295

AIRPORT DIAGRAM

AFD-339 [USN]

QUANTICO MCAF (TURNER FIELD) (KNYG)

QUANTICO, VIRGINIA



AIRPORT DIAGRAM

QUANTICO, VIRGINIA

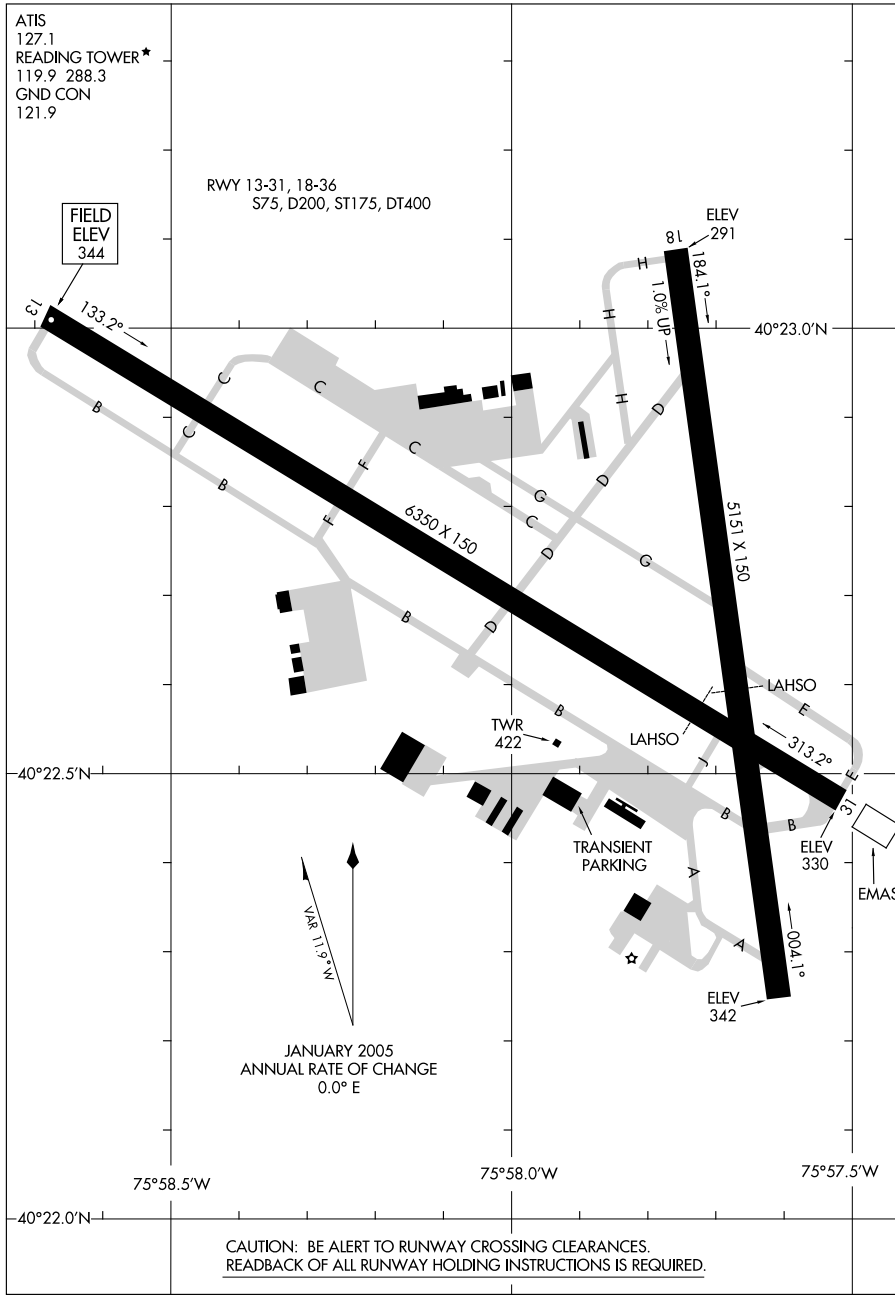
QUANTICO MCAF (TURNER FIELD) (KNYG)

10042

AIRPORT DIAGRAM

READING RGNL /CARL A SPAATZ FIELD (RDG)
READING, PENNSYLVANIA

AL-627 (FAA)



AIRPORT DIAGRAM

10042

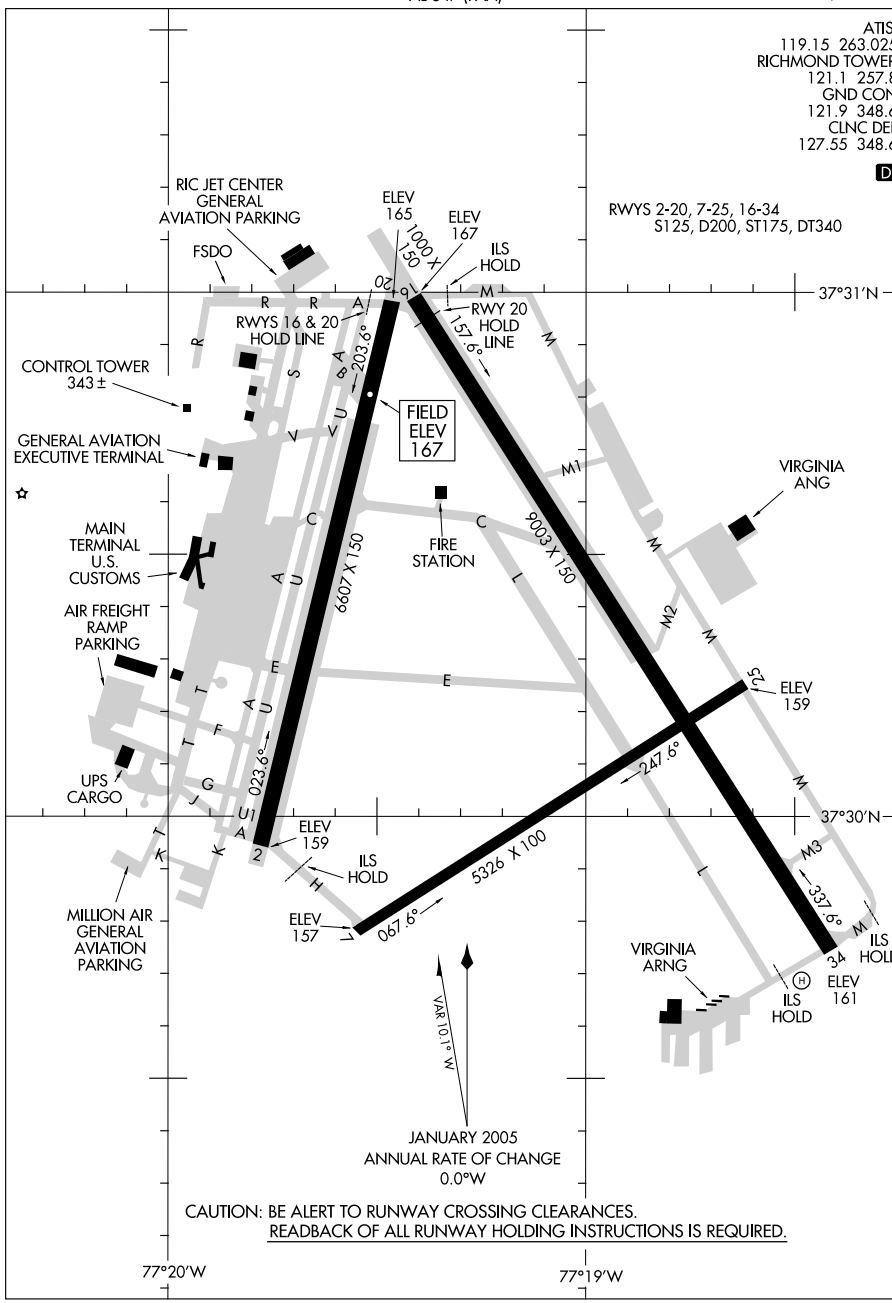
READING, PENNSYLVANIA
READING RGNL /CARL A SPAATZ FIELD (RDG)

09351

AIRPORT DIAGRAM

AL-347 (FAA)

RICHMOND INTL (RIC)
RICHMOND, VIRGINIA



AIRPORT DIAGRAM

09351

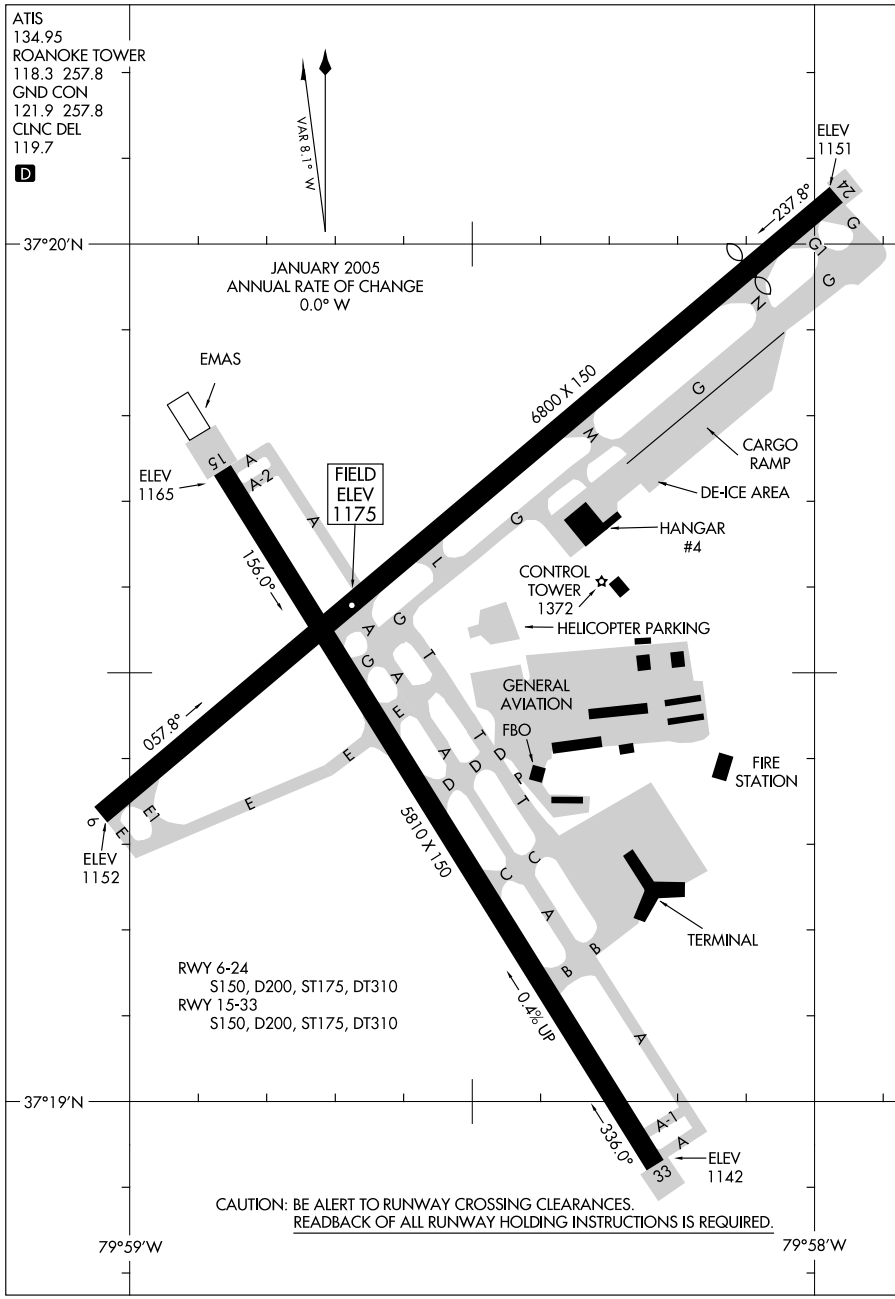
RICHMOND, VIRGINIA
RICHMOND INTL (RIC)

10042

AIRPORT DIAGRAM

ROANOKE RGNL/WOODRUM FIELD (ROA)
ROANOKE, VIRGINIA

AL-349 (FAA)



AIRPORT DIAGRAM

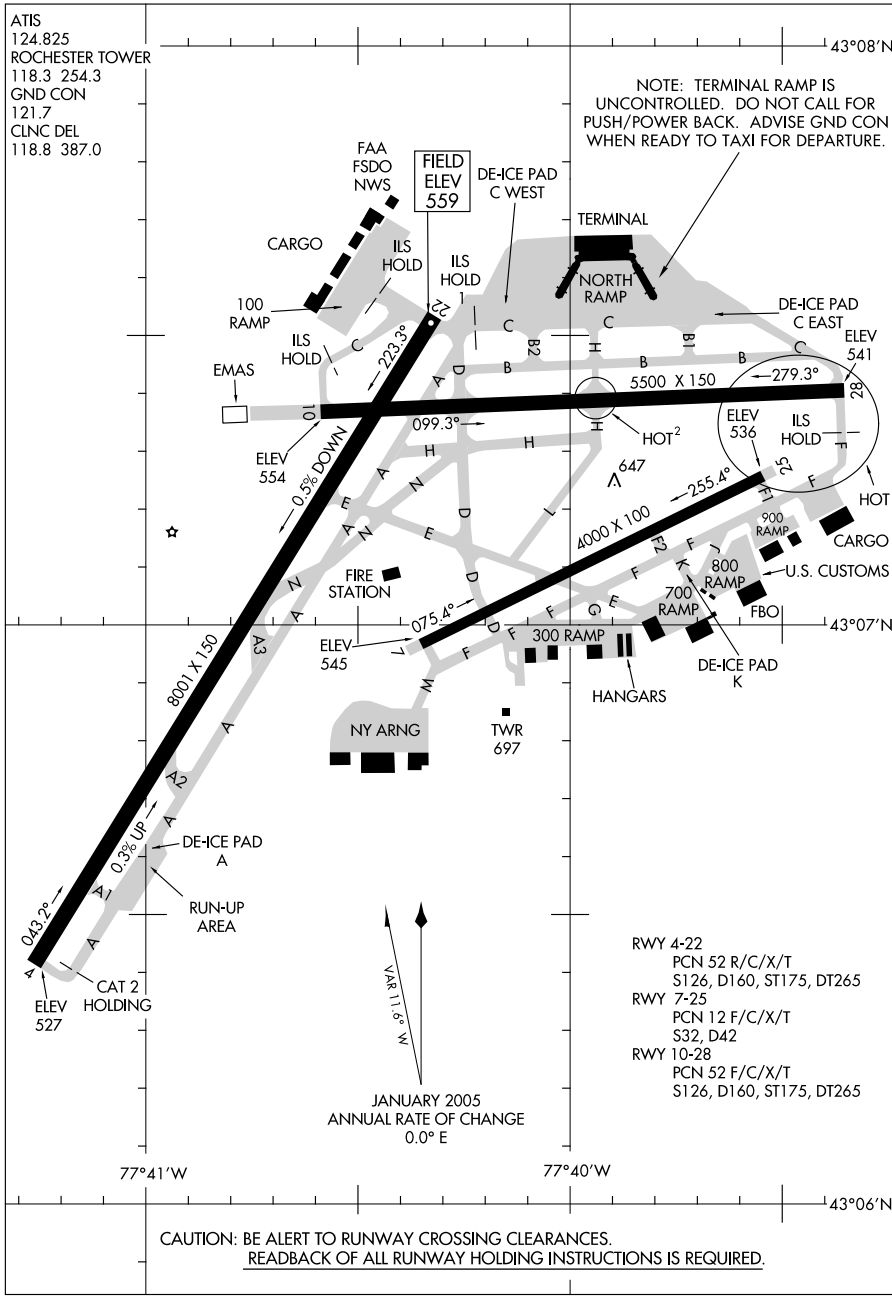
10042

ROANOKE, VIRGINIA
ROANOKE RGNL/WOODRUM FIELD (ROA)

10098

AIRPORT DIAGRAM

ROCHESTER/GREATER ROCHESTER INTL (ROC)
AL-351 (FAA)
ROCHESTER, NEW YORK



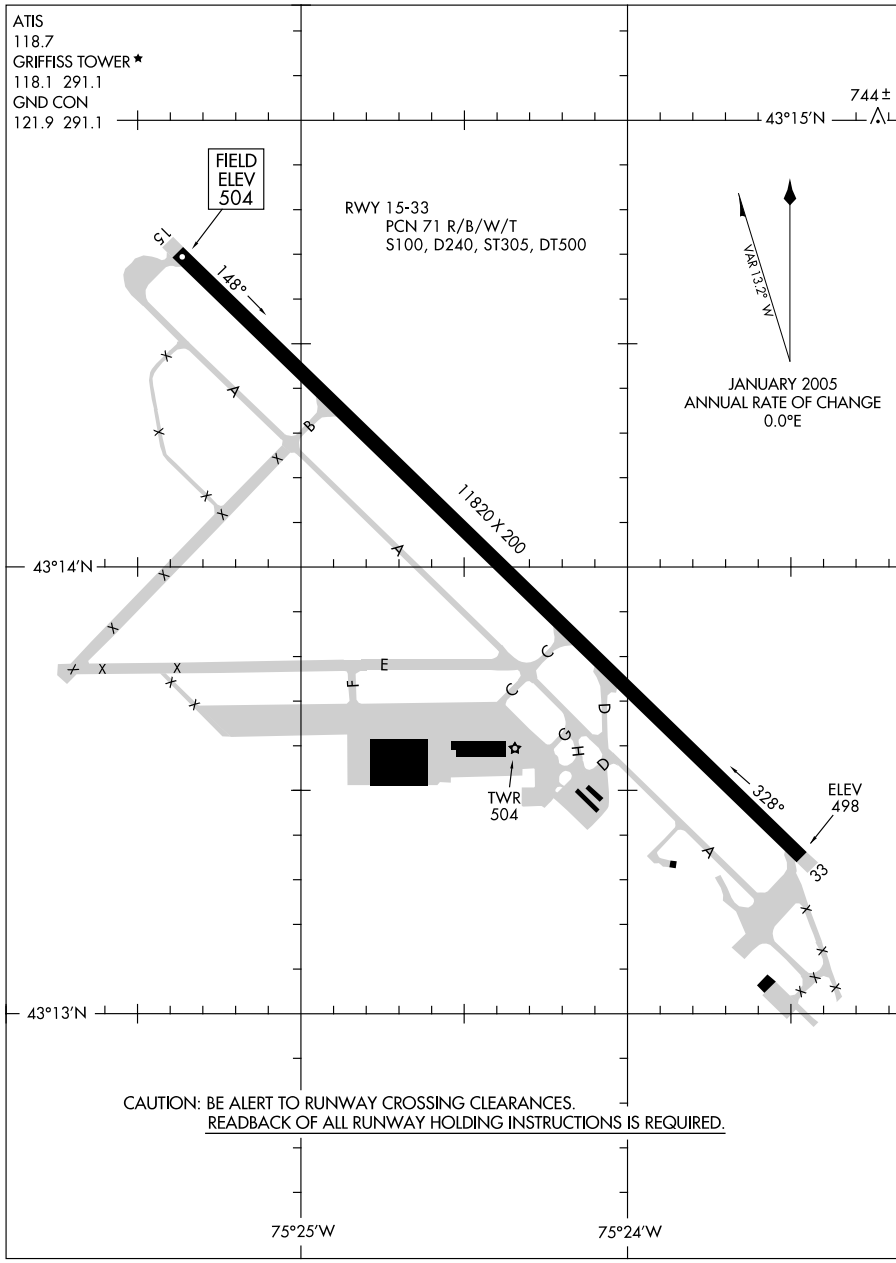
AIRPORT DIAGRAM
10098
ROCHESTER, NEW YORK
ROCHESTER/GREATER ROCHESTER INTL (ROC)

09295

AIRPORT DIAGRAM

AL-9515 (FAA)

ROME/GRIFFISS INTL (RME)
ROME, NEW YORK



AIRPORT DIAGRAM

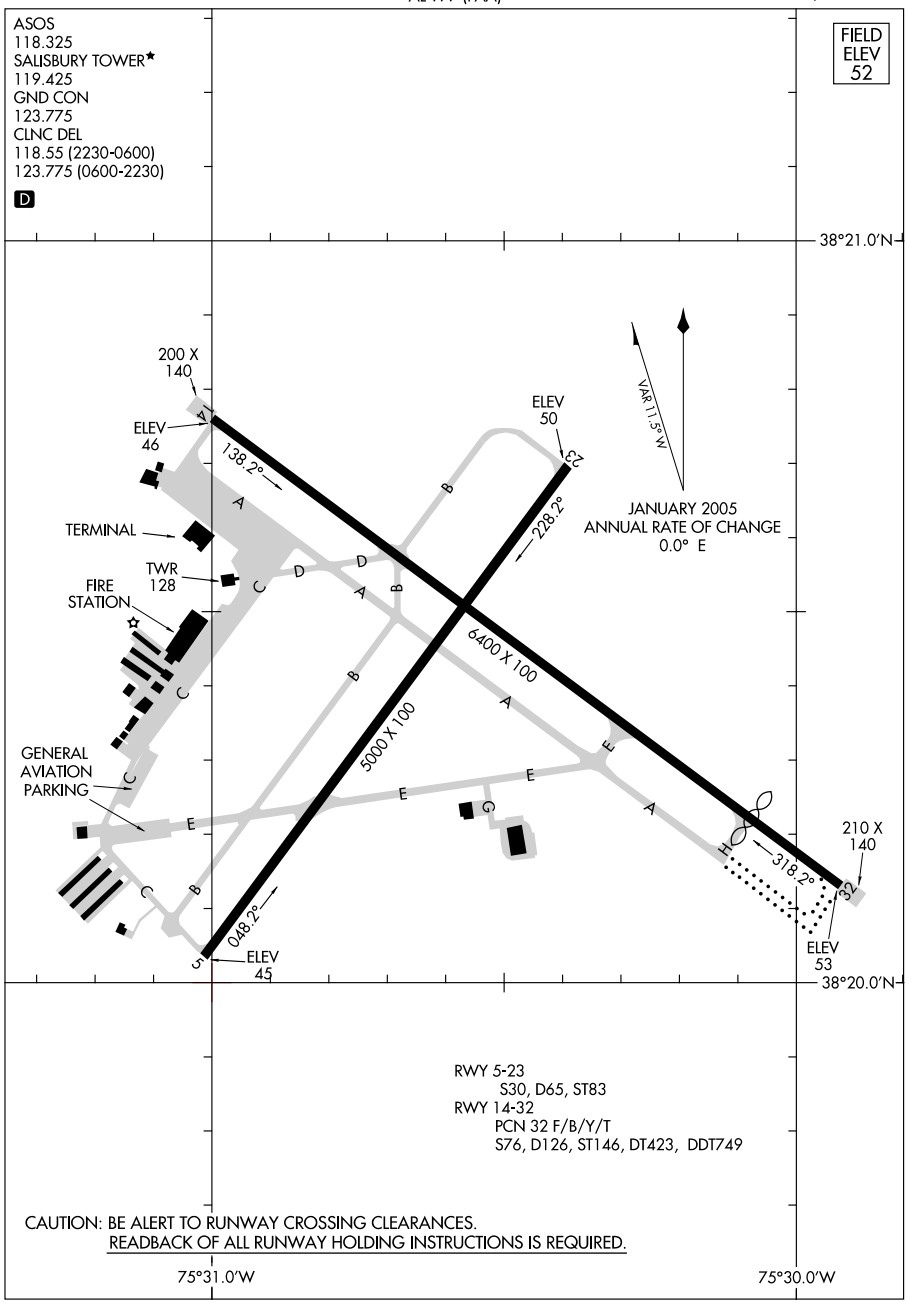
09295

ROME, NEW YORK
ROME/GRIFFISS INTL (RME)

10098

AIRPORT DIAGRAM

SALISBURY-OCEAN CITY WICOMICO RGNL (SBY)
SALISBURY, MARYLAND
AL-977 (FAA)



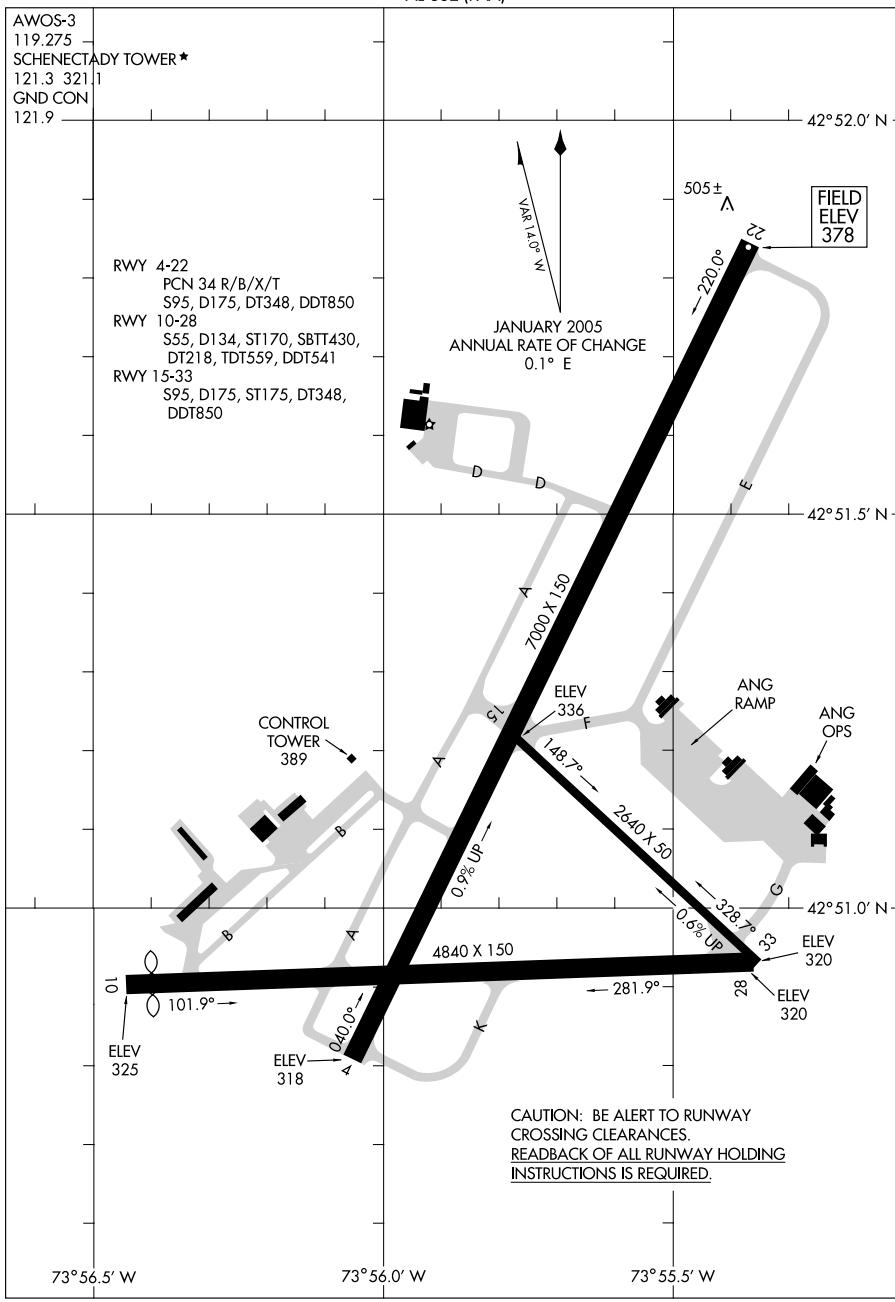
AIRPORT DIAGRAM
10098
SALISBURY, MARYLAND
SALISBURY-OCEAN CITY WICOMICO RGNL (SBY)

09183

AIRPORT DIAGRAM

SCHENECTADY COUNTY (SCH)
SCHENECTADY, NEW YORK

AL-382 (FAA)



AIRPORT DIAGRAM

09183

SCHENECTADY, NEW YORK
SCHENECTADY COUNTY (SCH)

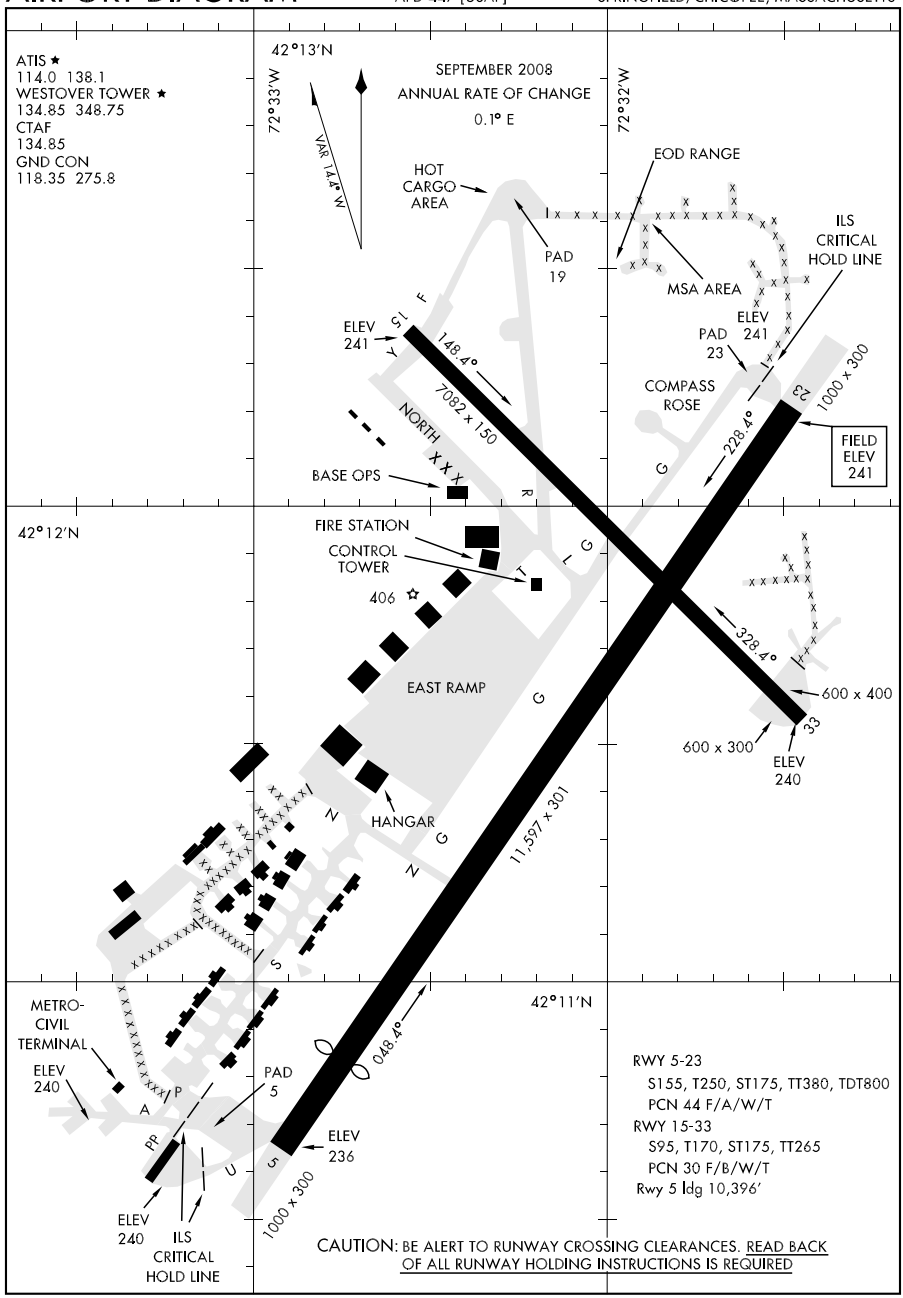
08269

AIRPORT DIAGRAM

WESTOVER ARB/METROPOLITAN (KCEF)

AFD-447 [USAF]

SPRINGFIELD/CHICOPEE, MASSACHUSETTS



AIRPORT DIAGRAM

SPRINGFIELD/CHICOPEE, MASSACHUSETTS

WESTOVER ARB/METROPOLITAN (KCEF)

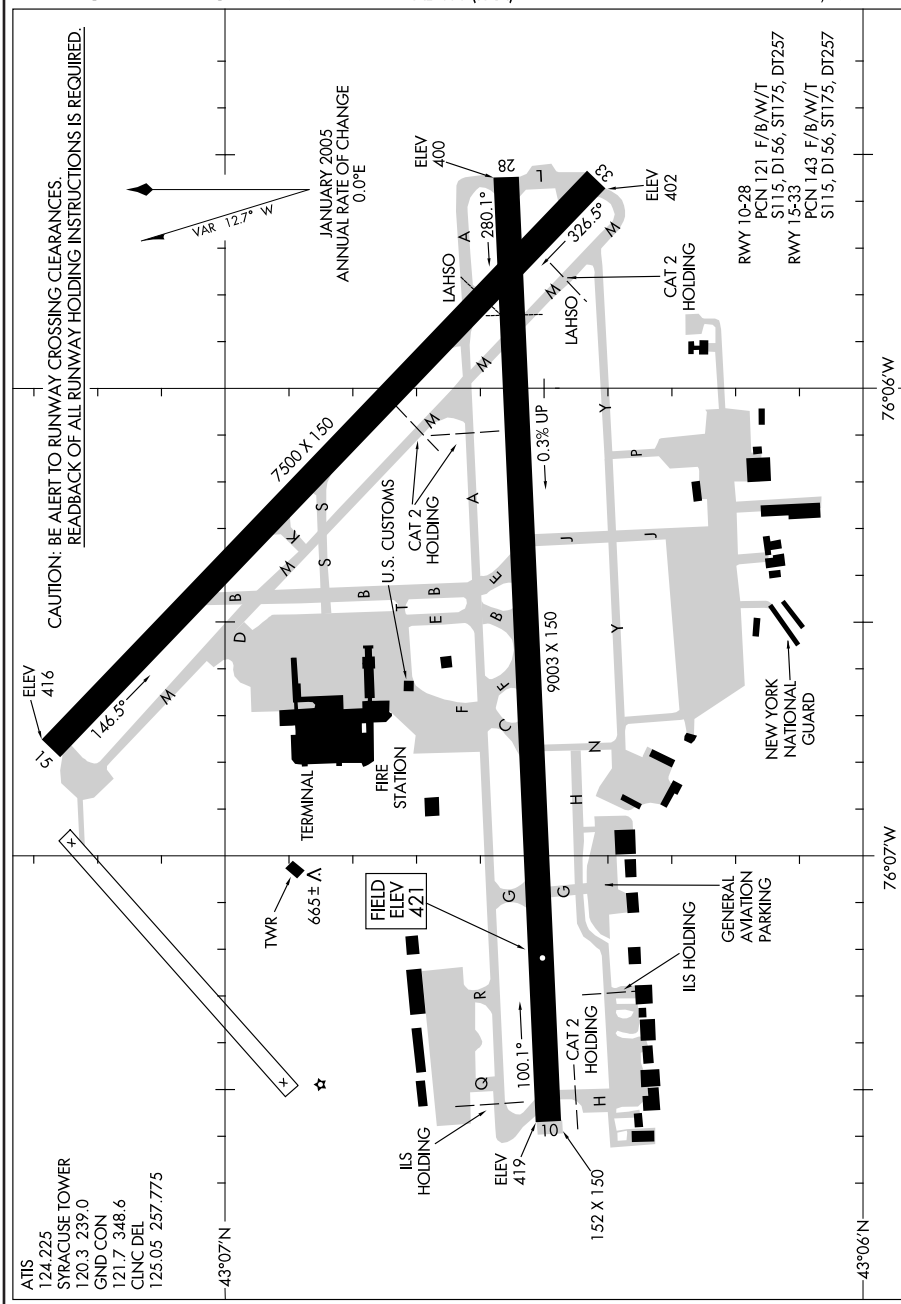
10154

AIRPORT DIAGRAM

AL-411 (FAA)

SYRACUSE HANCOCK INTL (SYR)

SYRACUSE, NEW YORK



AIRPORT DIAGRAM

10154

SYRACUSE, NEW YORK

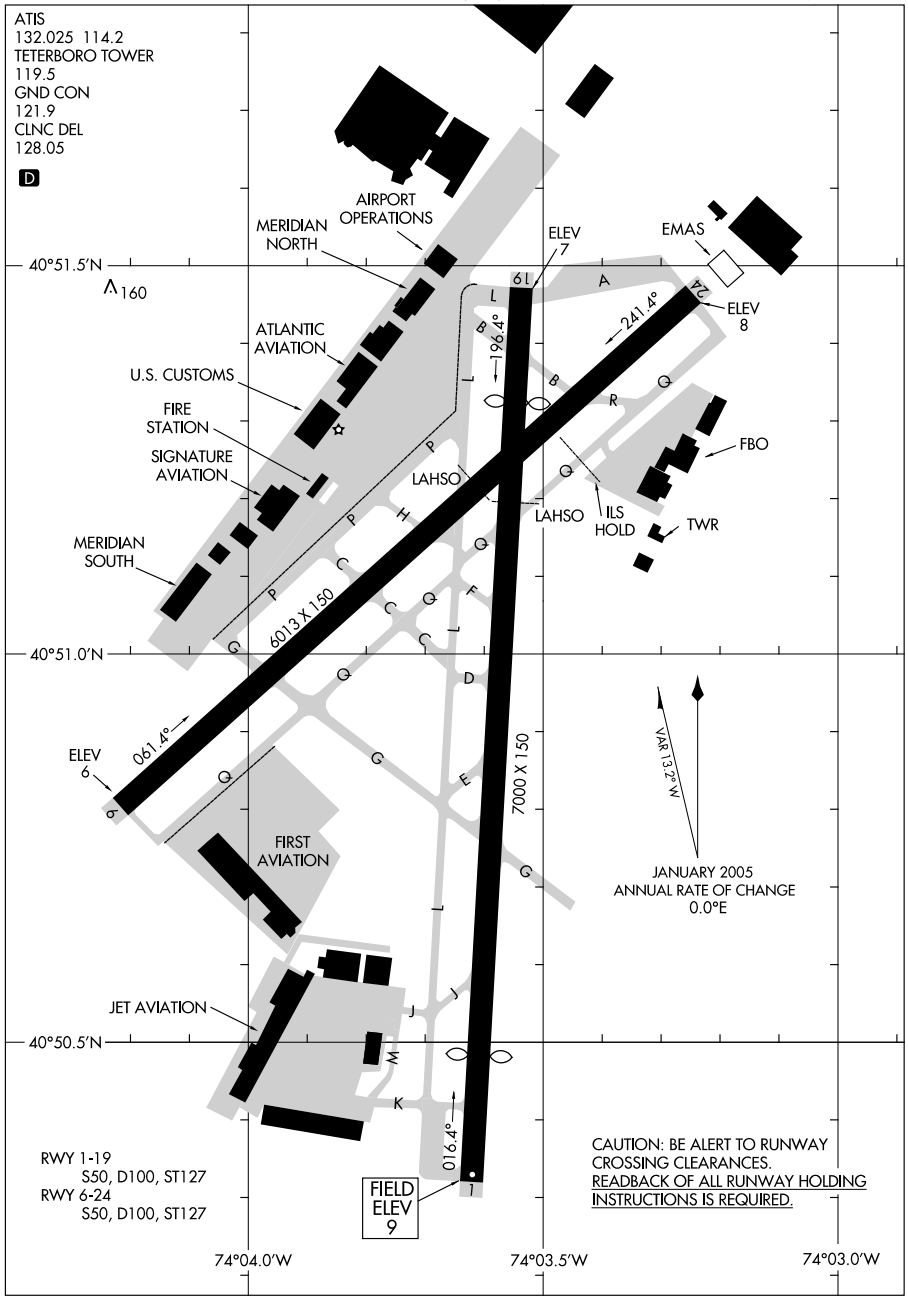
SYRACUSE HANCOCK INTL (SYR)

10042

AIRPORT DIAGRAM

AL-890 (FAA)

TETERBORO (TEB)
TETERBORO, NEW JERSEY



AIRPORT DIAGRAM

10042

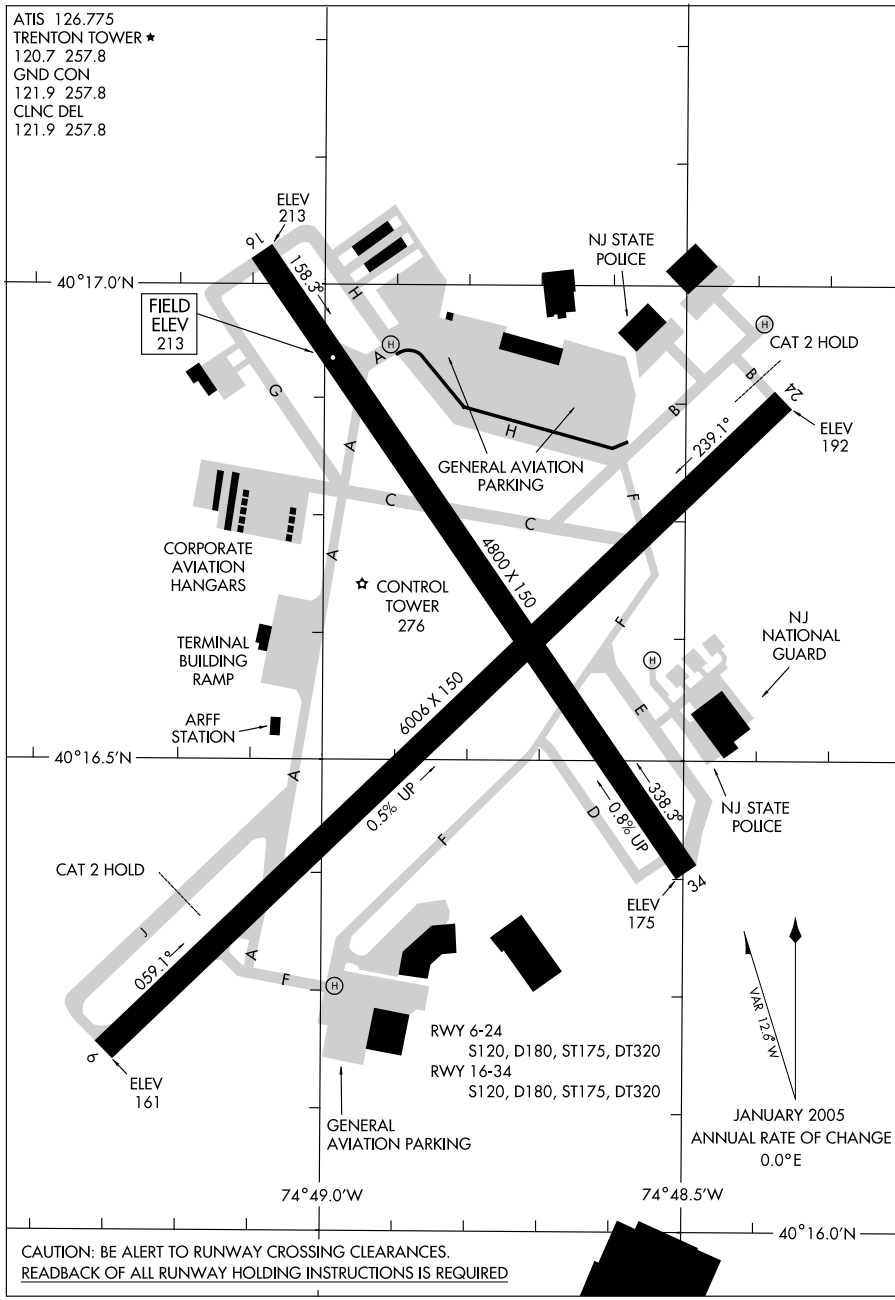
TETERBORO, NEW JERSEY
TETERBORO (TEB)

08045

AIRPORT DIAGRAM

AL-982 (FAA)

TRENTON MERCER (TTN)
TRENTON, NEW JERSEY



AIRPORT DIAGRAM

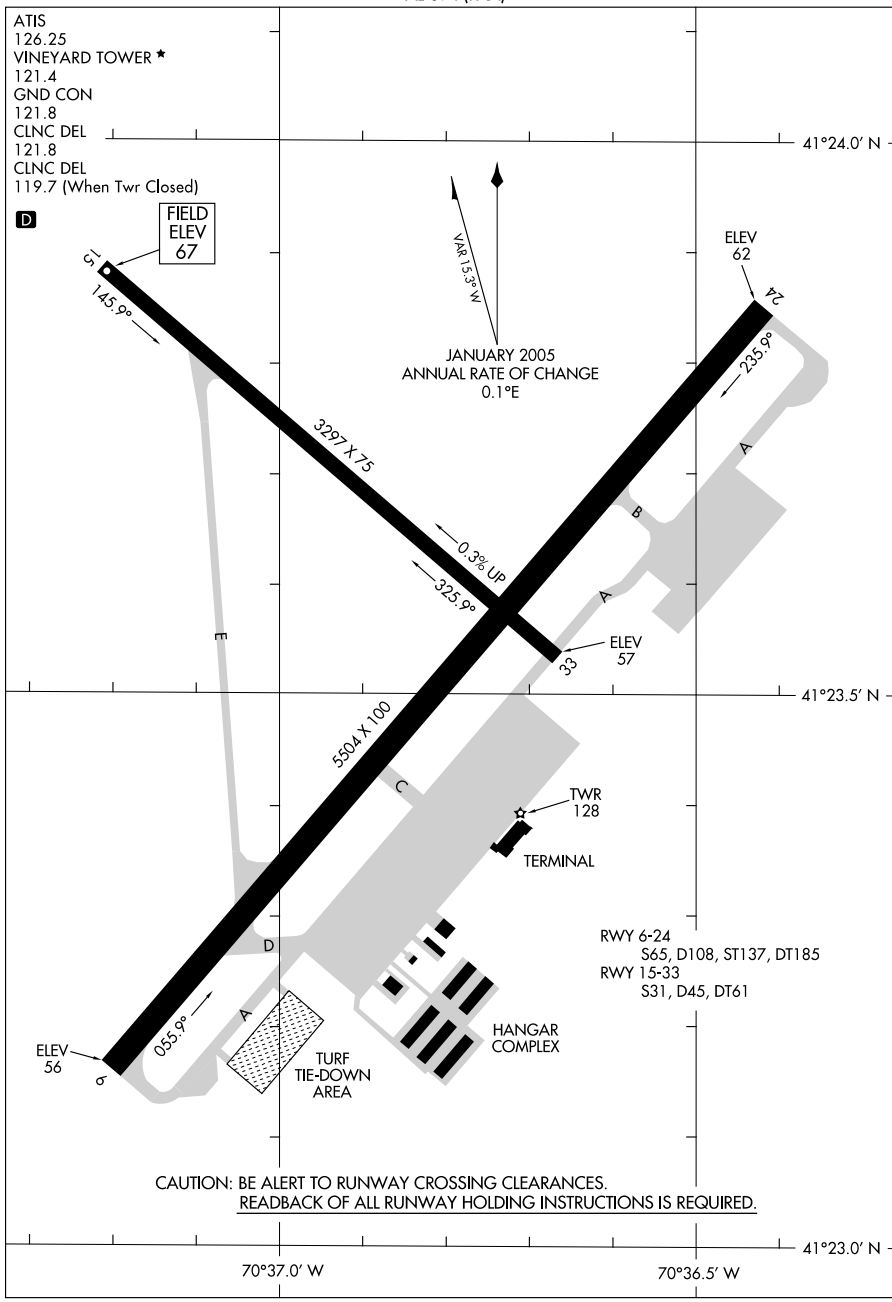
08045

TRENTON, NEW JERSEY
TRENTON MERCER (TTN)

09239

AIRPORT DIAGRAM

VINEYARD HAVEN / MARTHAS VINEYARD (MVY)
VINEYARD HAVEN, MASSACHUSETTS
AL-694 (FAA)



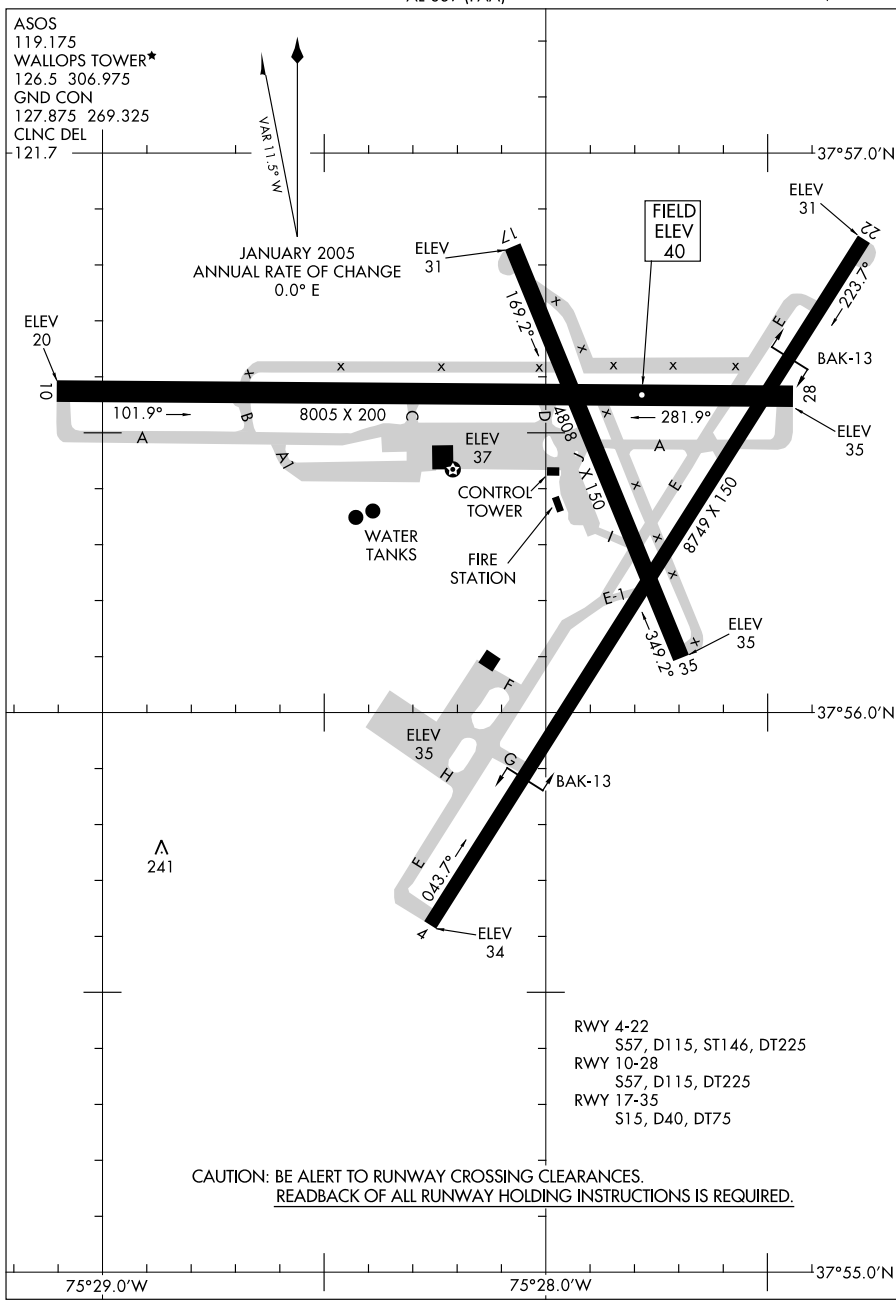
AIRPORT DIAGRAM
09239
VINEYARD HAVEN, MASSACHUSETTS
VINEYARD HAVEN / MARTHAS VINEYARD (MVY)

10042

AIRPORT DIAGRAM

AL-639 (FAA)

WALLOPS FLIGHT FACILITY (WAL)
WALLOPS ISLAND, VIRGINIA



AIRPORT DIAGRAM

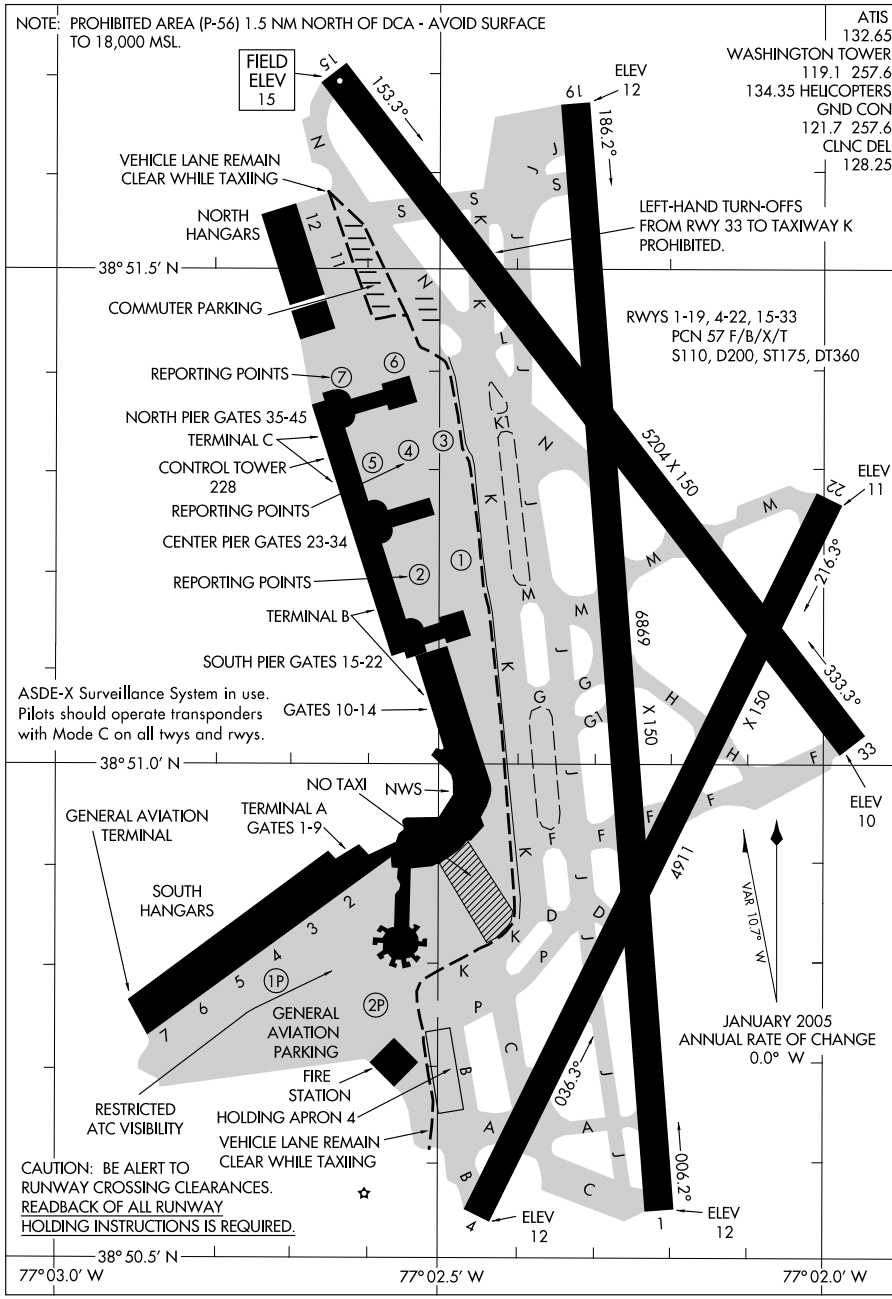
10042

WALLOPS ISLAND, VIRGINIA
WALLOPS FLIGHT FACILITY (WAL)

09351

AIRPORT DIAGRAM

WASHINGTON / RONALD REAGAN WASHINGTON NATIONAL (DCA)
AL-443 (FAA)
WASHINGTON, D.C.



AIRPORT DIAGRAM

09351

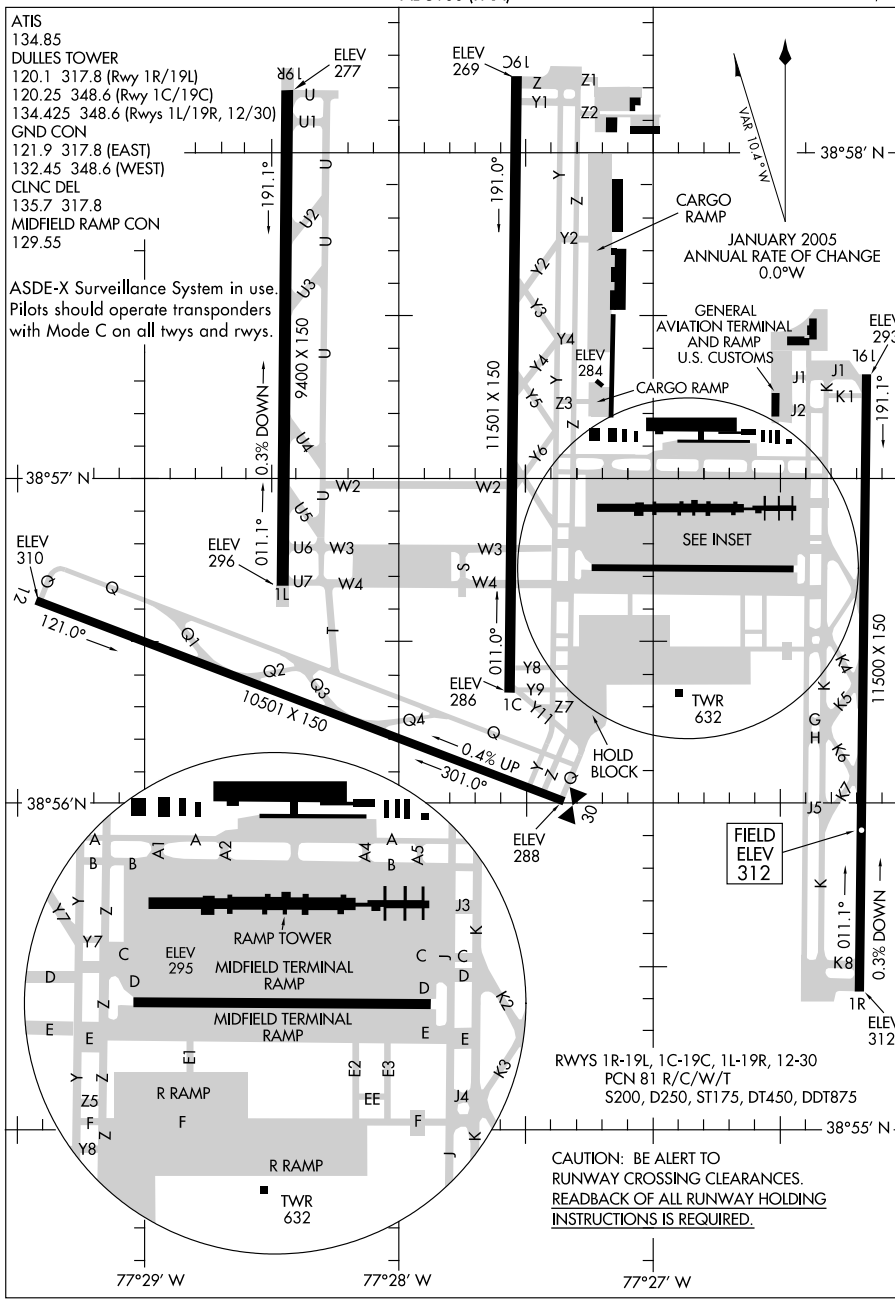
WASHINGTON / RONALD REAGAN WASHINGTON NATIONAL (DCA)
WASHINGTON, D.C.

10154

AIRPORT DIAGRAM

WASHINGTON DULLES INTL (IAD)
WASHINGTON, DC

AL-5100 (FAA)



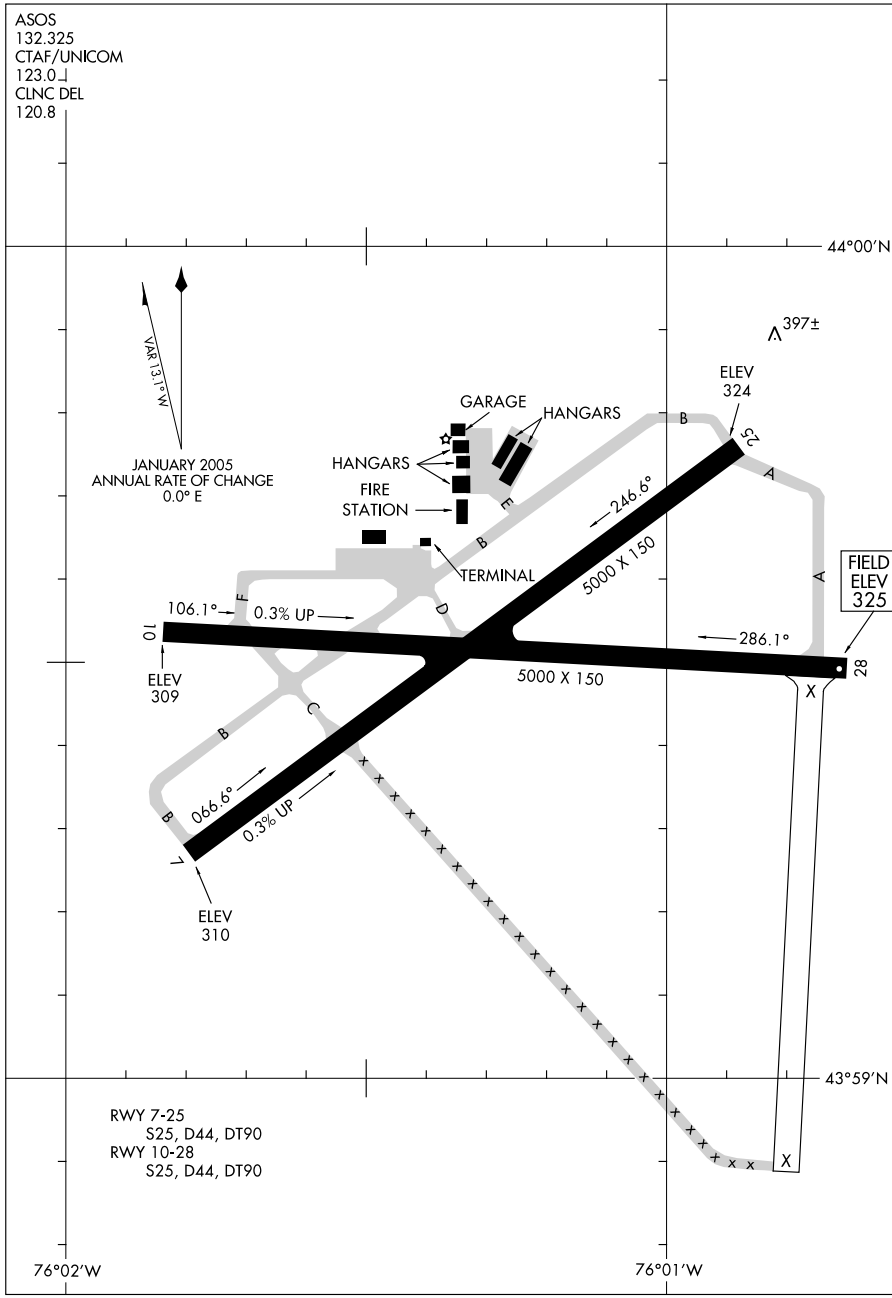
AIRPORT DIAGRAM
10154
WASHINGTON, DC
WASHINGTON DULLES INTL (IAD)

10098

AIRPORT DIAGRAM

AL-666 (FAA)

WATERTOWN INTL (ART)
WATERTOWN, NEW YORK



AIRPORT DIAGRAM

10098

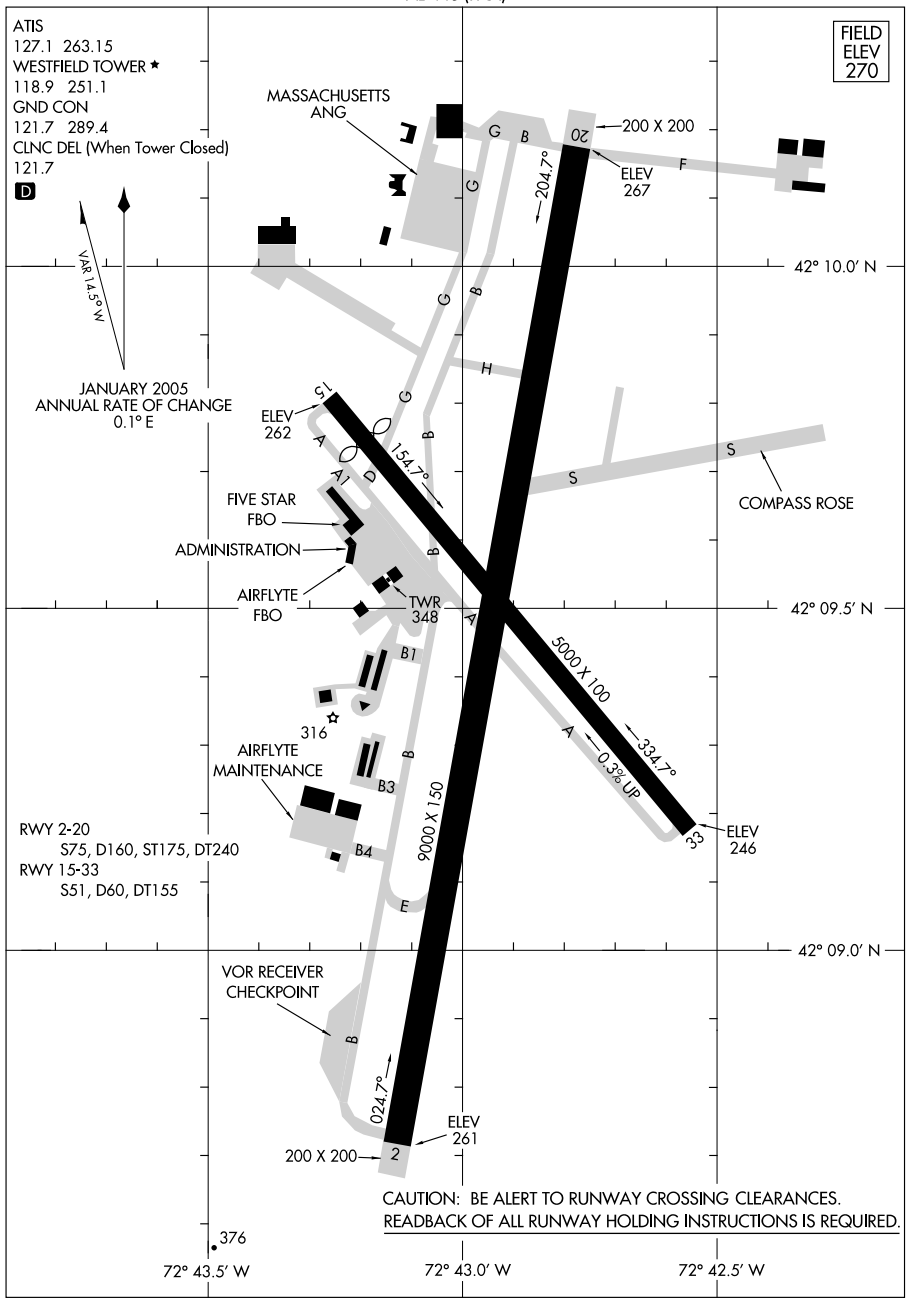
WATERTOWN, NEW YORK
WATERTOWN INTL (ART)

10154

AIRPORT DIAGRAM

WESTFIELD/BARNES MUNI (BAF)
WESTFIELD/SPRINGFIELD, MASSACHUSETTS

AL-446 (FAA)



AIRPORT DIAGRAM

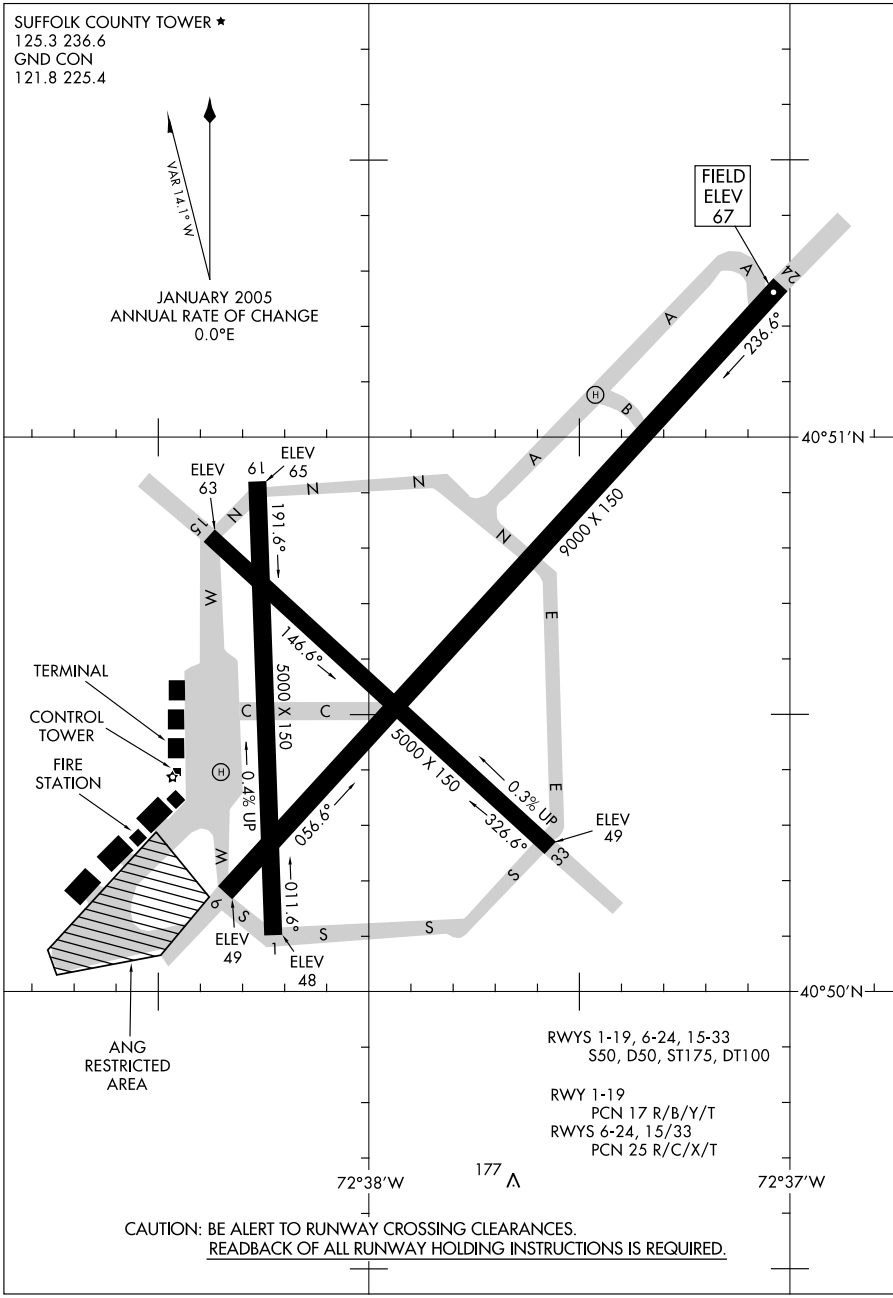
10154

WESTFIELD/SPRINGFIELD, MASSACHUSETTS
WESTFIELD/ BARNES MUNI (BAF)

08045

AIRPORT DIAGRAM

WESTHAMPTON BEACH/ FRANCIS S. GABRESKI (FOK)
AL-996 (FAA) WESTHAMPTON BEACH, NEW YORK



AIRPORT DIAGRAM

WESTHAMPTON BEACH, NEW YORK
WESTHAMPTON BEACH/ FRANCIS S. GABRESKI (FOK)

08045

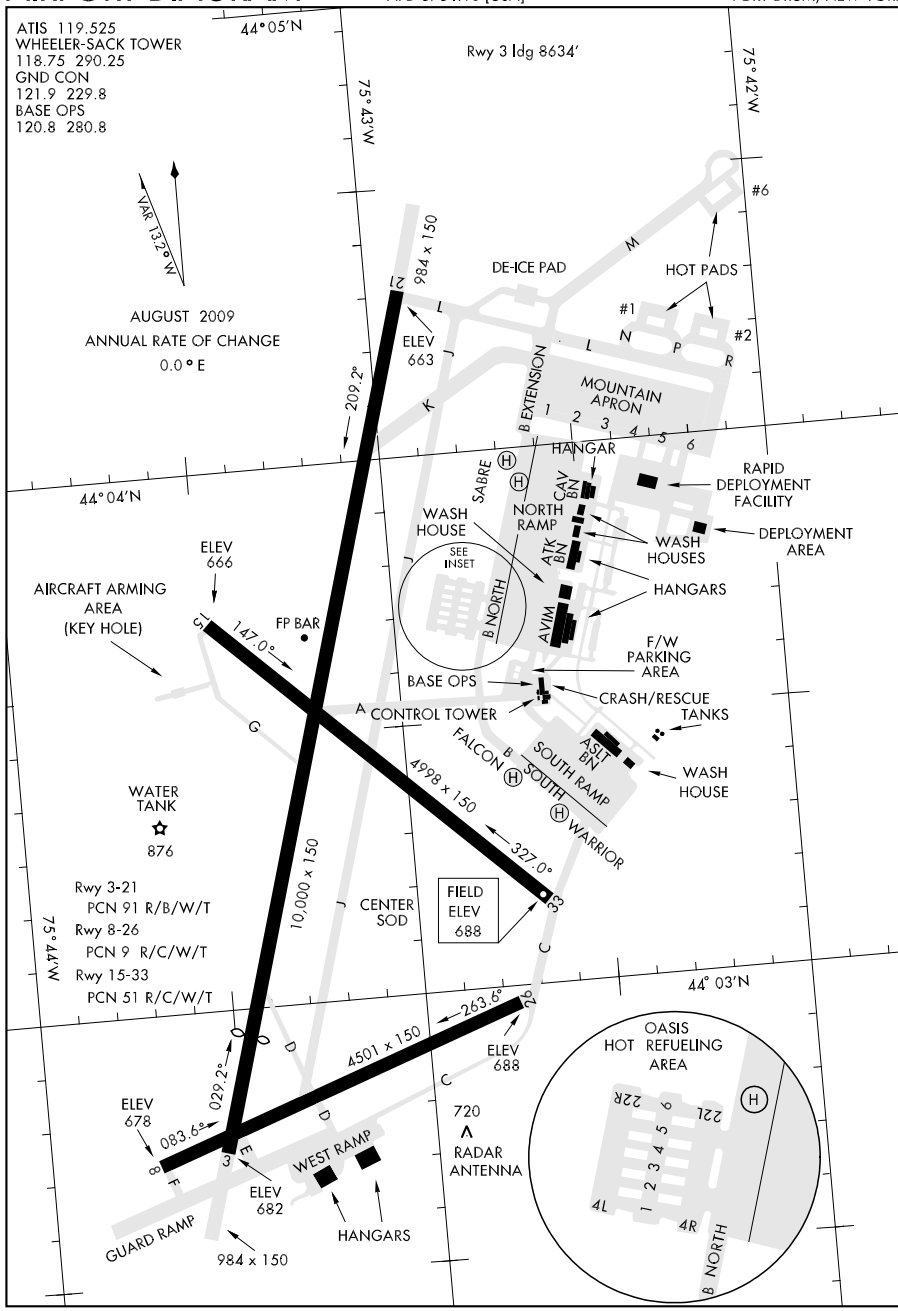
09239

AIRPORT DIAGRAM

WHEELER-SACK AAF (KGTB)

AFD-5754.10 [USA]

FORT DRUM, NEW YORK



AIRPORT DIAGRAM

FORT DRUM, NEW YORK

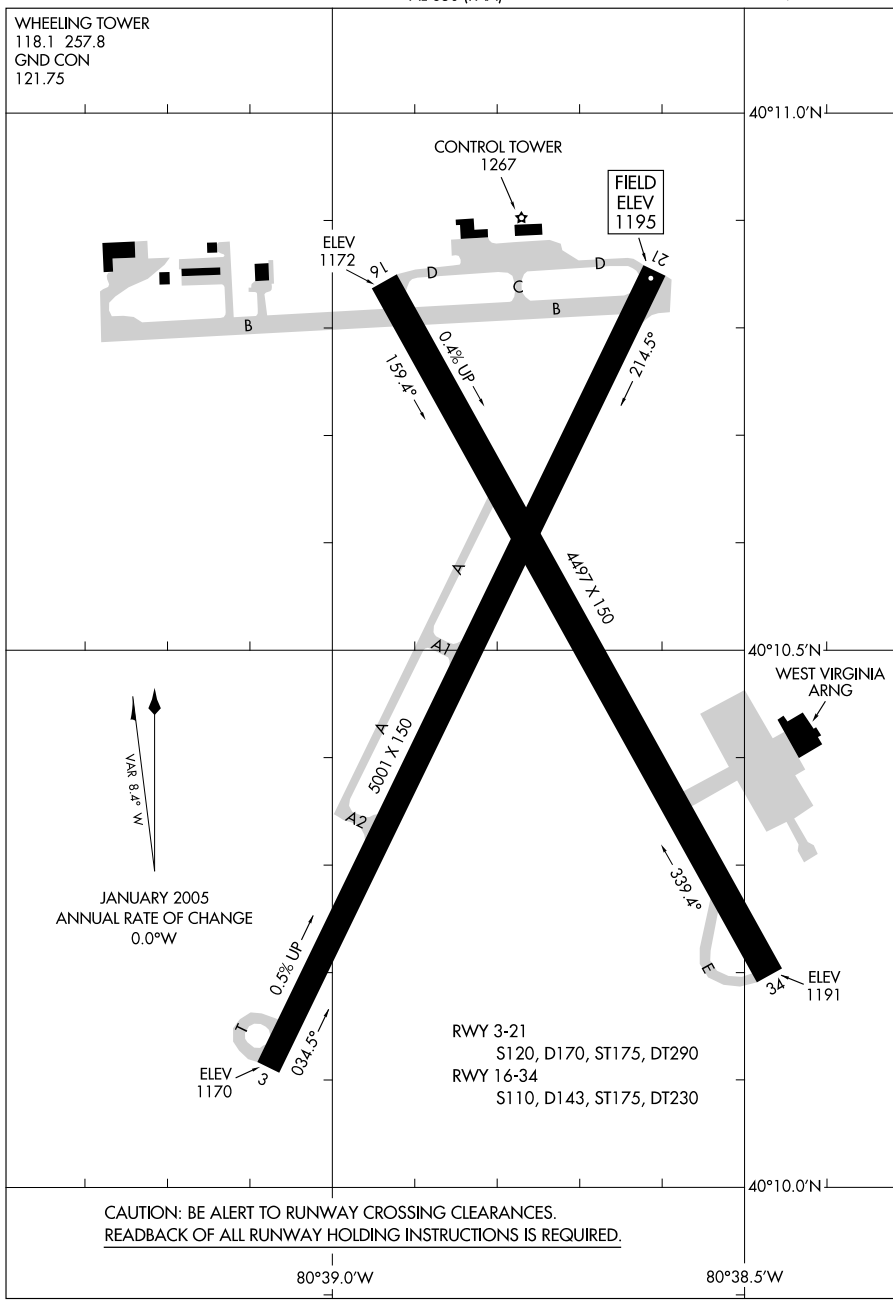
WHEELER-SACK AAF (KGTB)

06271

AIRPORT DIAGRAM

WHEELING OHIO COUNTY (HLG)
WHEELING, WEST VIRGINIA

AL-650 (FAA)



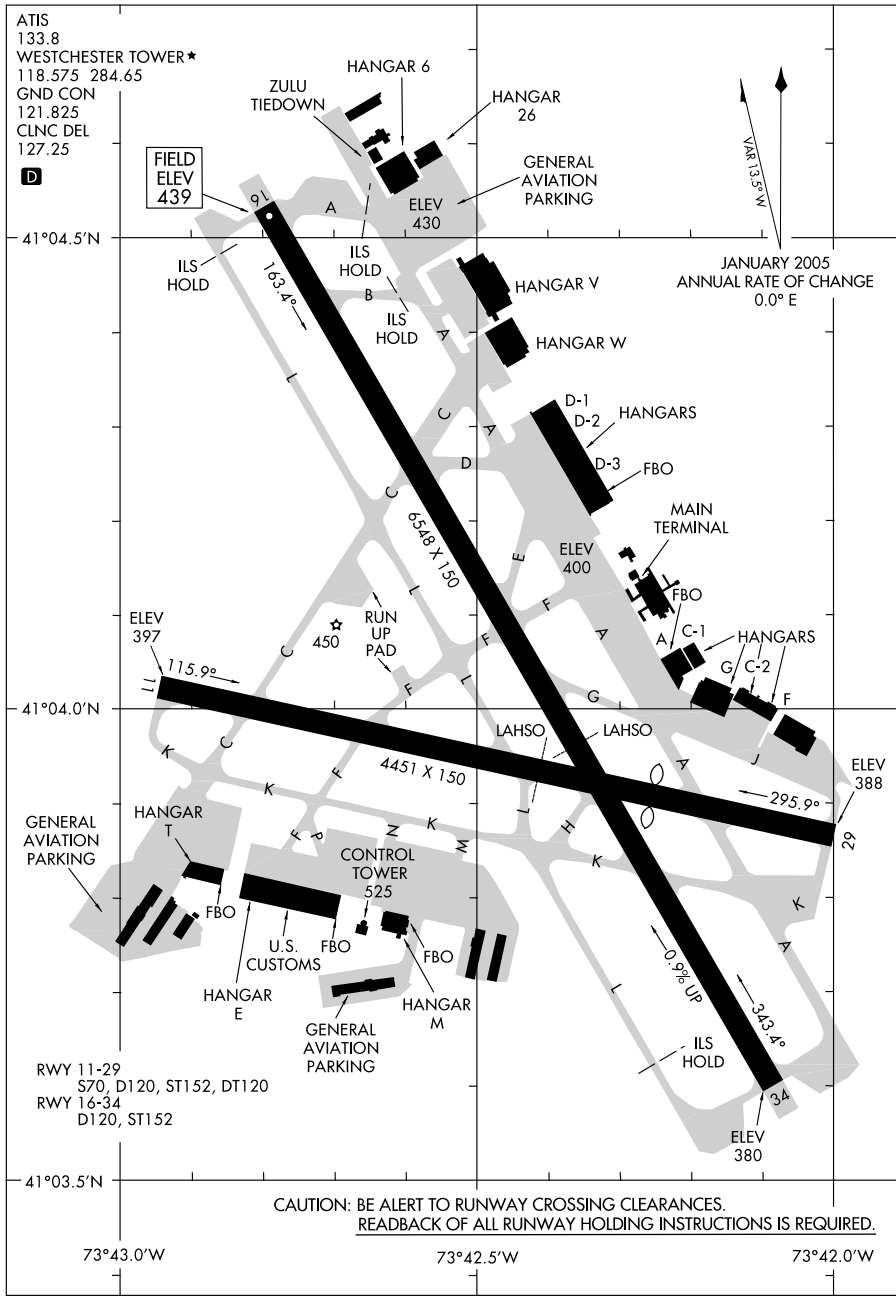
AIRPORT DIAGRAM
06271

WHEELING, WEST VIRGINIA
WHEELING OHIO COUNTY (HLG)

09015

AIRPORT DIAGRAM

WHITE PLAINS/WESTCHESTER COUNTY (HPN)
AL-651 (FAA)
WHITE PLAINS, NEW YORK



AIRPORT DIAGRAM

WHITE PLAINS, NEW YORK
WHITE PLAINS/WESTCHESTER COUNTY (HPN)

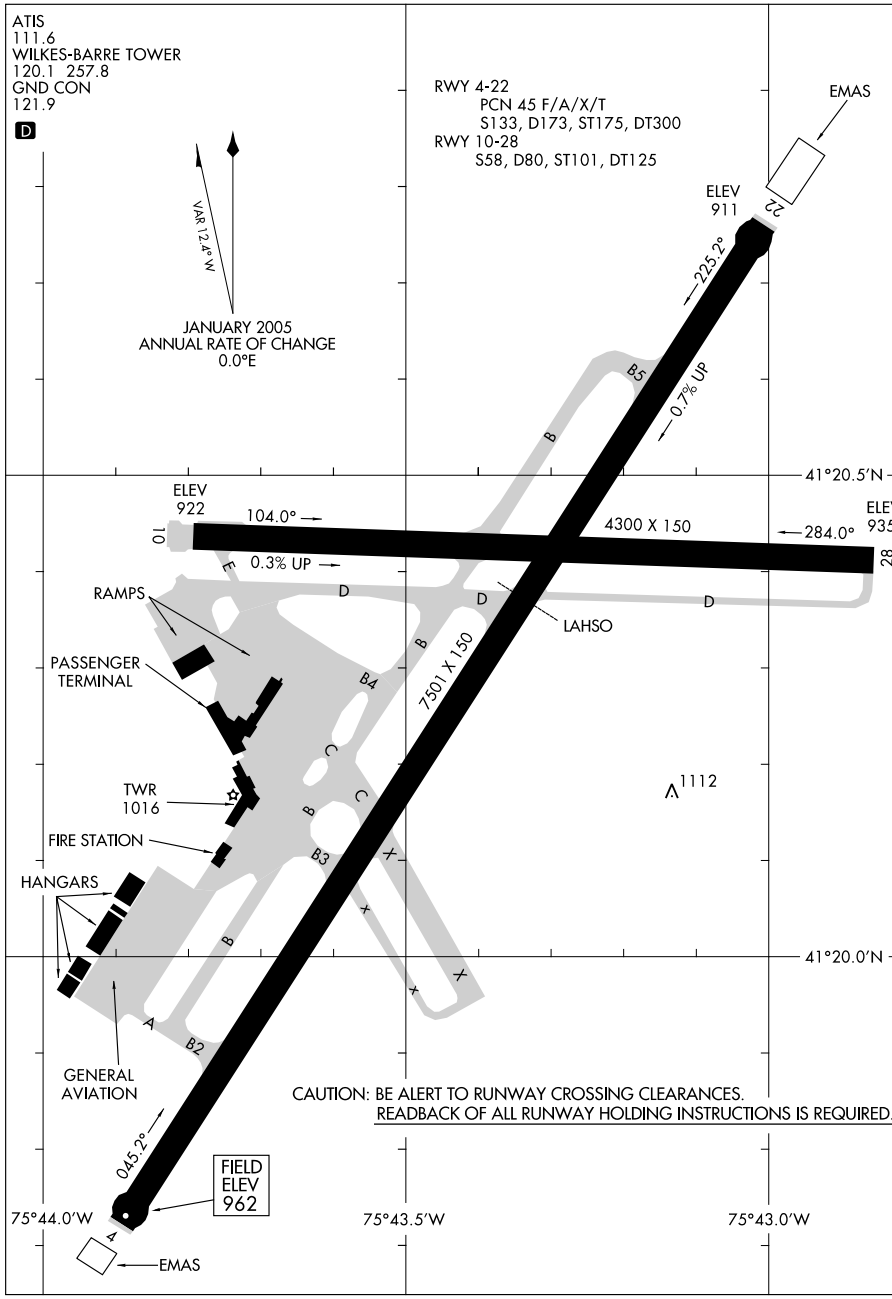
09015

10098

AIRPORT DIAGRAM

AL-661 (FAA)

WILKES-BARRE/SCRANTON INTL (AVP)
WILKES-BARRE/SCRANTON, PENNSYLVANIA



AIRPORT DIAGRAM

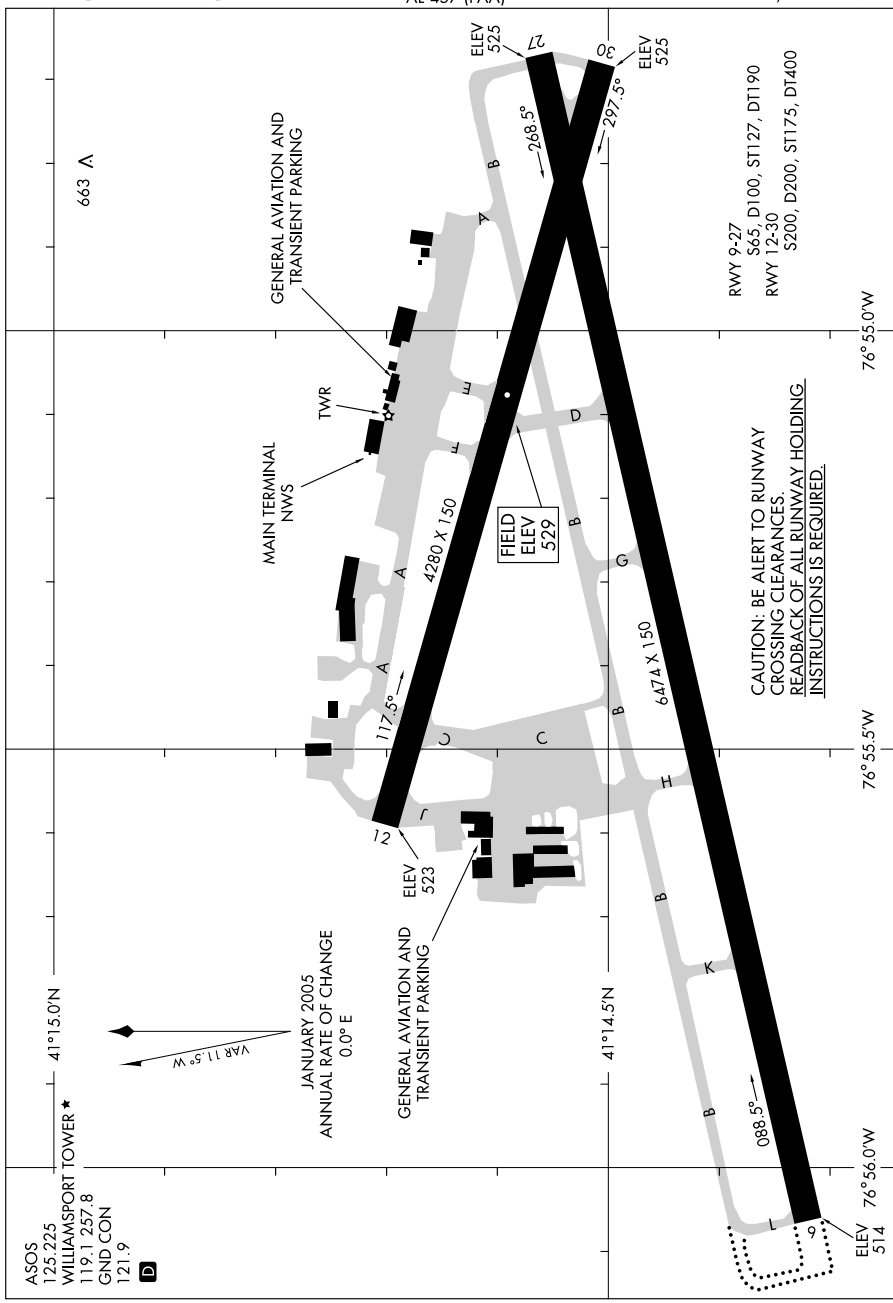
10098

WILKES-BARRE/SCRANTON, PENNSYLVANIA
WILKES-BARRE/SCRANTON INTL (AVP)

10098

AIRPORT DIAGRAM

WILLIAMSPORT RGNL (IPT)
WILLIAMSPORT, PENNSYLVANIA



AIRPORT DIAGRAM

10098

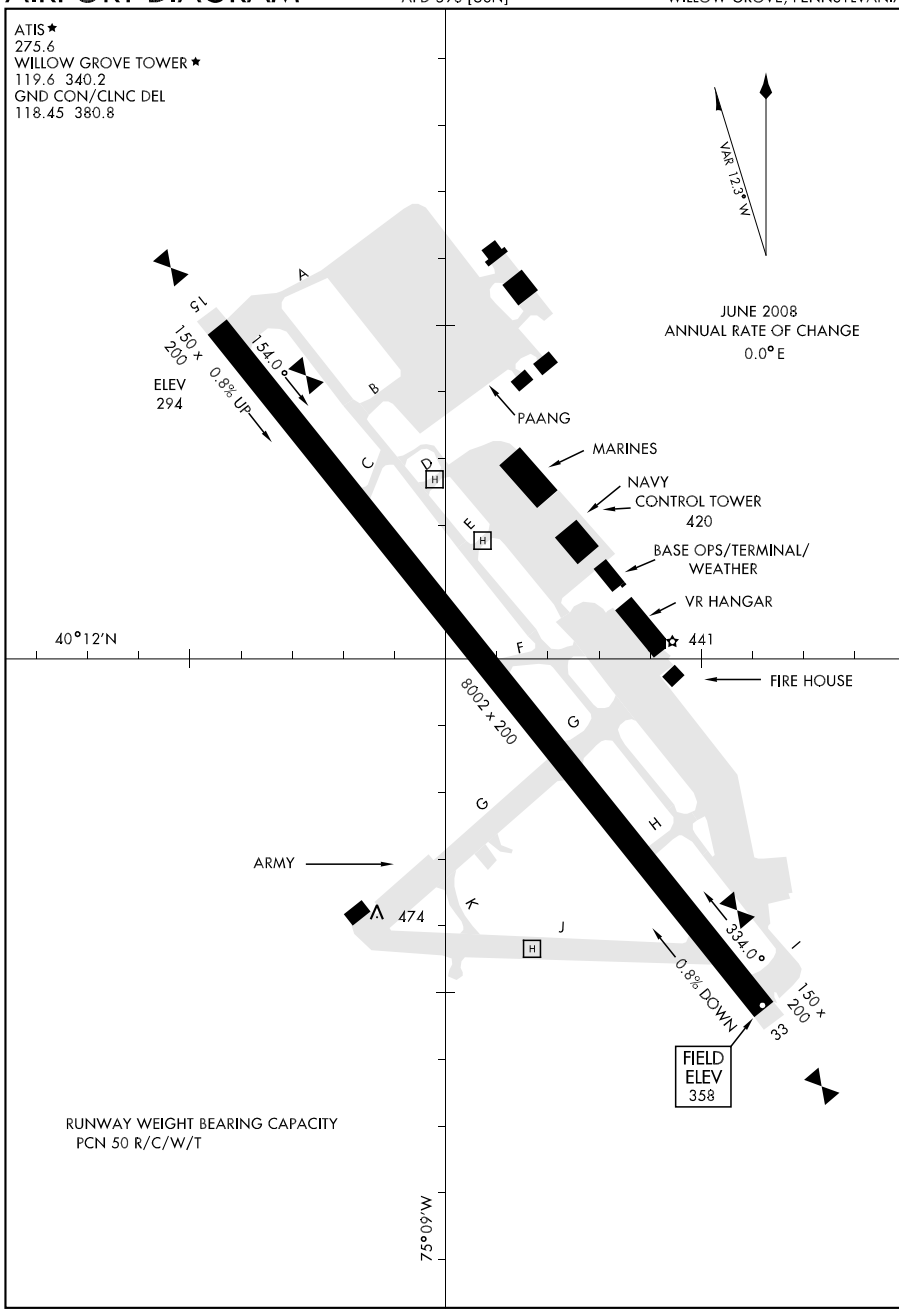
WILLIAMSPORT, PENNSYLVANIA
WILLIAMSPORT RGNL (IPT)

08213

AIRPORT DIAGRAM

AFD-598 [USN]

WILLOW GROVE NAS JRB (KNXX)
WILLOW GROVE, PENNSYLVANIA



AIRPORT DIAGRAM

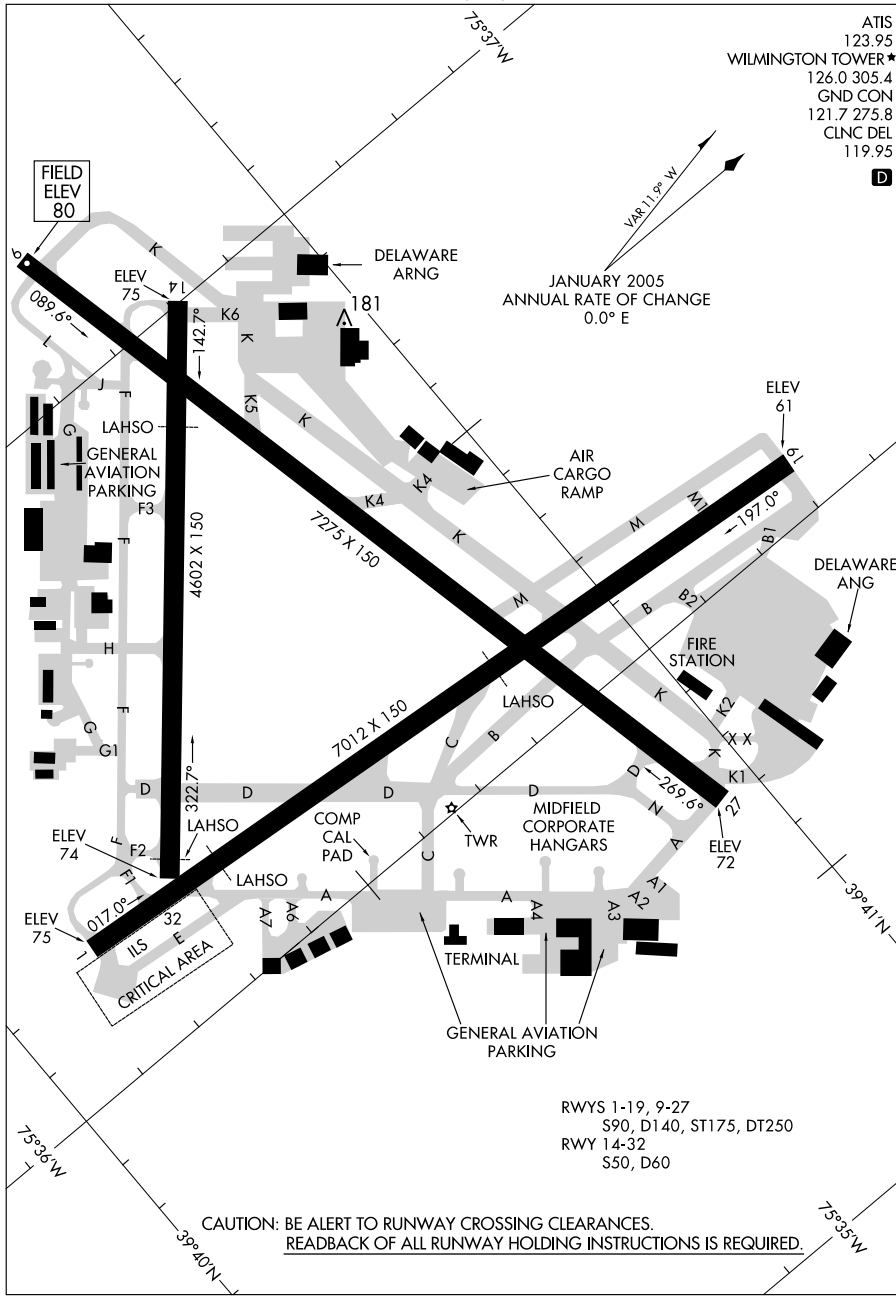
WILLOW GROVE, PENNSYLVANIA
WILLOW GROVE NAS JRB (KNXX)

10098

AIRPORT DIAGRAM

WILMINGTON/ NEW CASTLE (ILG)
WILMINGTON, DELAWARE

AL-458 (FAA)



AIRPORT DIAGRAM

10098

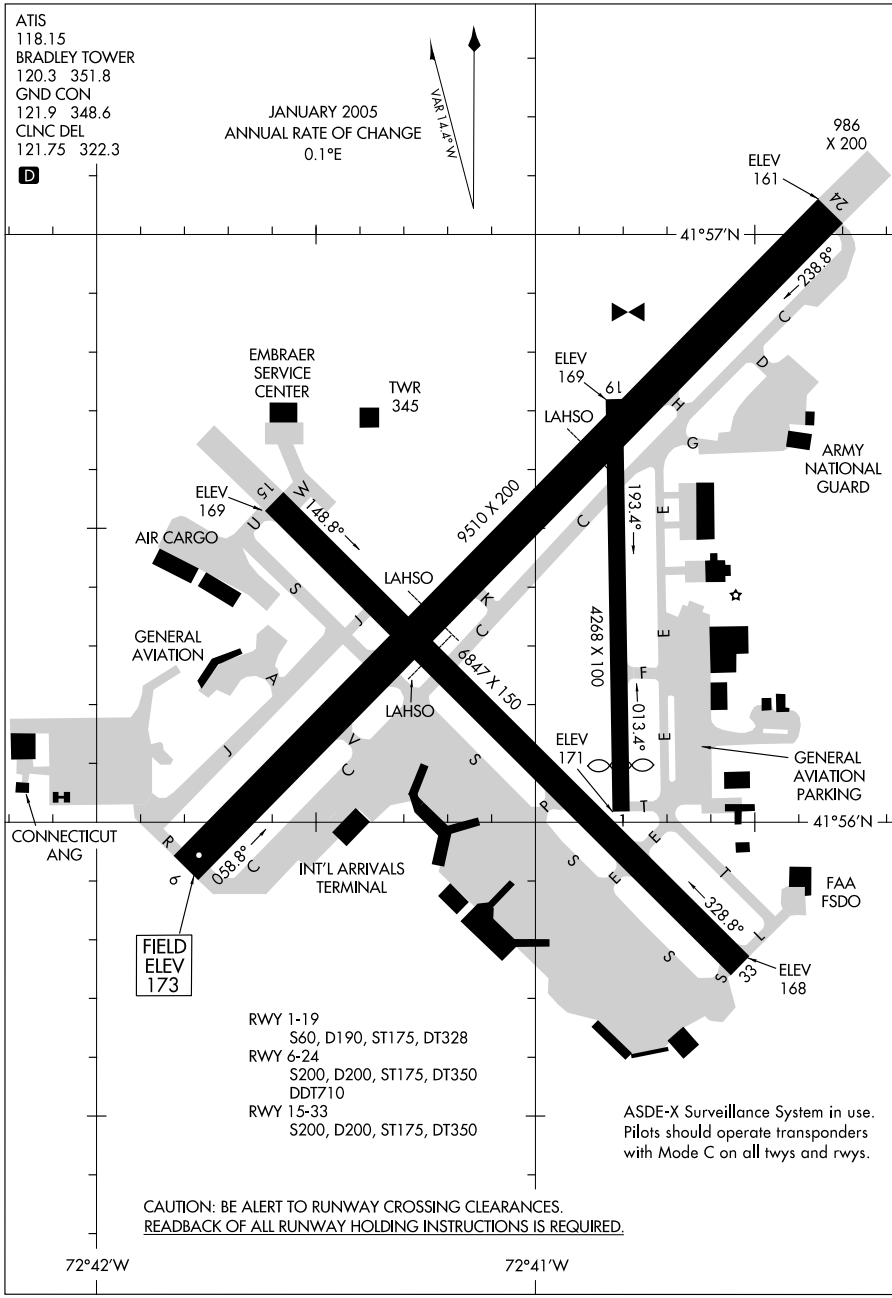
WILMINGTON, DELAWARE
WILMINGTON/ NEW CASTLE (ILG)

10098

AIRPORT DIAGRAM

AL-460 (FAA)

WINDSOR LOCKS / BRADLEY INTL (BDL)
WINDSOR LOCKS, CONNECTICUT



AIRPORT DIAGRAM

10098

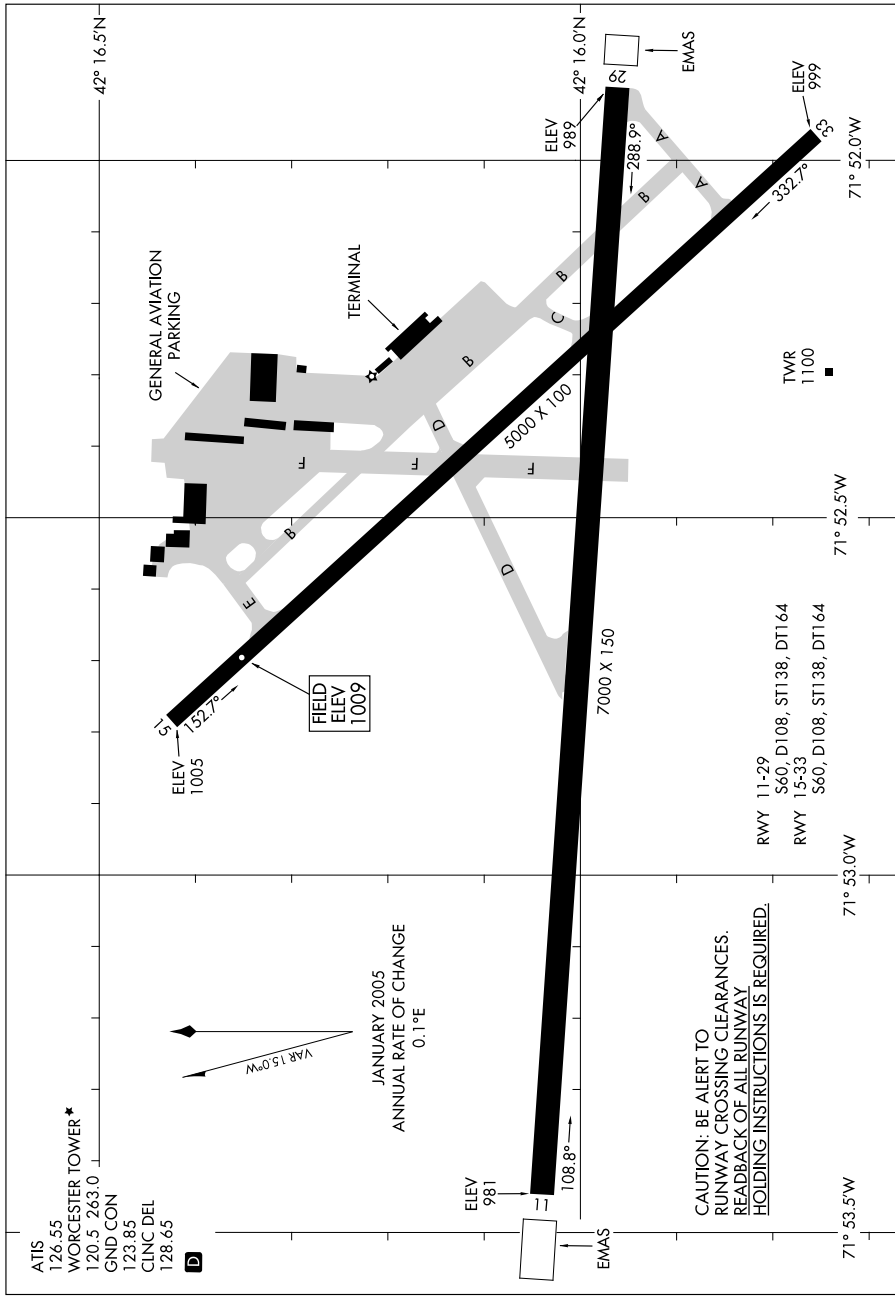
WINDSOR LOCKS, CONNECTICUT
WINDSOR LOCKS / BRADLEY INTL (BDL)

10042

AIRPORT DIAGRAM

AL-652 (FAA)

WORCESTER RGNL (ORH)
WORCESTER, MASSACHUSETTS



AIRPORT DIAGRAM

10042

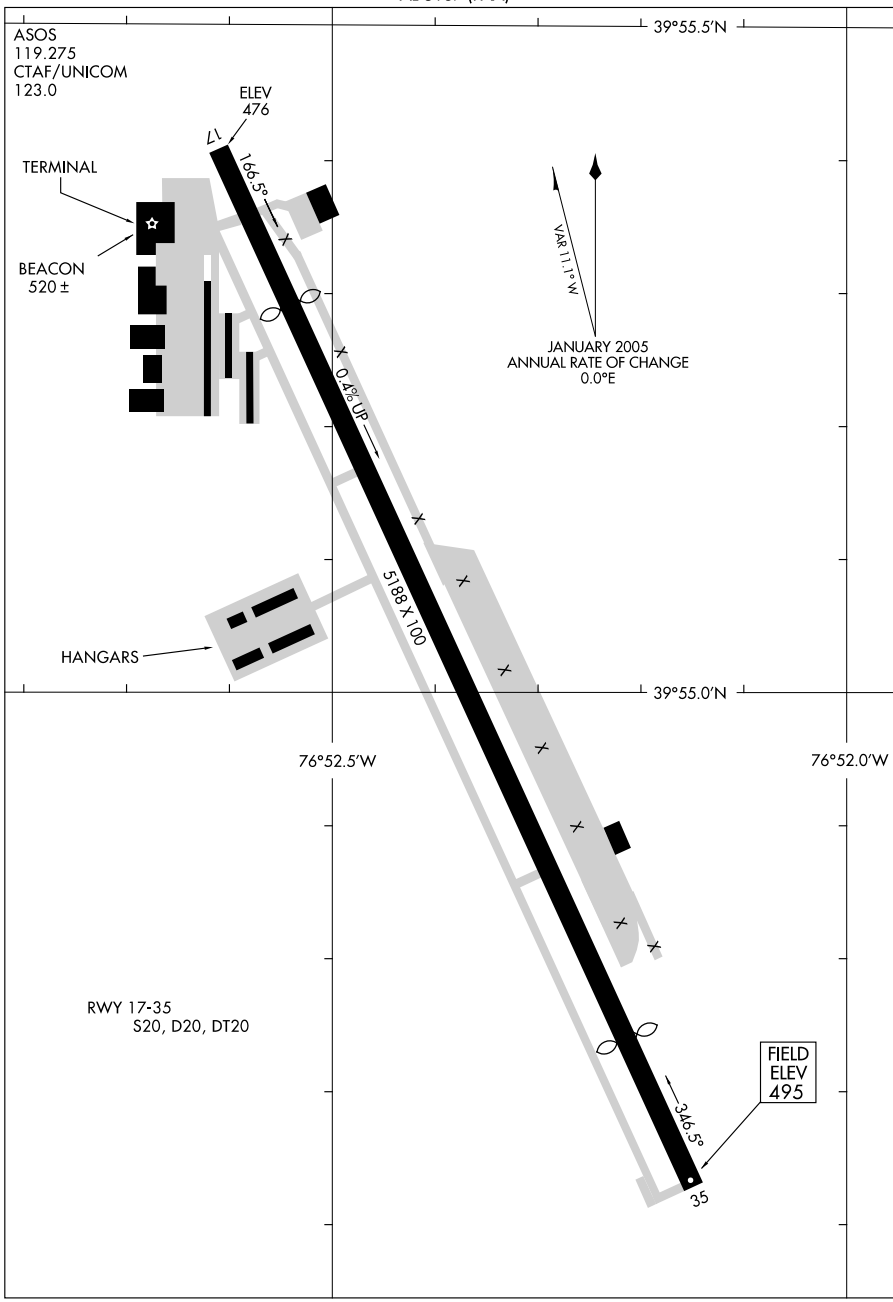
WORCESTER, MASSACHUSETTS
WORCESTER RGNL (ORH)

09183

AIRPORT DIAGRAM

YORK (THV)
YORK, PENNSYLVANIA

AL-5137 (FAA)



AIRPORT DIAGRAM

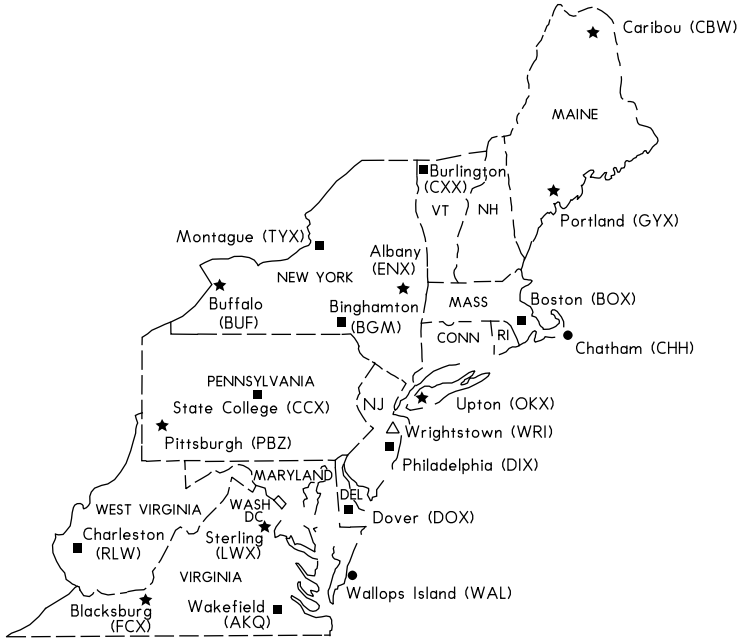
09183

YORK, PENNSYLVANIA
YORK (THV)

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INTENTIONALLY
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NATIONAL WEATHER SERVICE (NWS)
UPPER AIR OBSERVING STATION (UAOS)
AND
WEATHER RADAR NETWORK



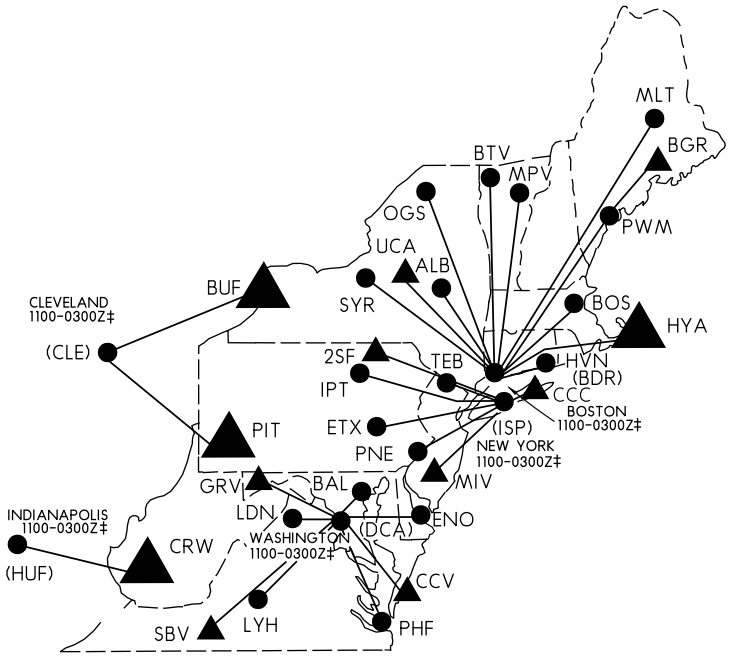
LEGEND

- △ AVIATION WEATHER SERVICE (MILITARY)
- ▲ AIR TRAFFIC CONTROL RADAR
- ★ UPPER AIR OBSERVING STATION/RADAR
- ■ RADAR ONLY
- ● UAOS-BALLOON RELEASE AROUND 1100 UTC AND 2300 UTC DAILY
- o OTHER NWS UPPER AIR STATIONS-BALLOON RELEASE TIMES ARE FLEXIBLE BUT GENERALLY AROUND SUNRISE AND/OR EARLY AFTERNOON

NOTE: FOR RELEASES LATER THAN 1130 UTC AND 2330 UTC, AND FOR SPECIAL RELEASES AT OTHER THAN THE SCHEDULED HOURS, AN AERONAUTICAL INFORMATION MESSAGE WILL BE FILED.

ENROUTE FLIGHT ADVISORY SERVICE (EFAS)

See Aeronautical Information Manual (AIM) for available services



BOSTON EFAS HIGH ALTITUDE FREQUENCY 133.925
ATLANTA EFAS HIGH ALTITUDE FREQUENCY 135.475
CLEVELAND EFAS HIGH ALTITUDE FREQUENCY 135.425
INDIANAPOLIS EFAS HIGH ALTITUDE FREQUENCY 134.825
WASHINGTON EFAS HIGH ALTITUDE FREQUENCY 134.525
NEW YORK EFAS HIGH ALTITUDE FREQUENCY 134.725

● LOW ALTITUDE COMMUNICATIONS OUTLET (122.0)

▲ HIGH ALTITUDE COMMUNICATIONS OUTLET

▲ BOTH LOW AND HIGH ALTITUDE COMMUNICATIONS OUTLET